

Established 1848.

ST. LOUIS, THURSDAY, 31 MAY, 1883.

No. 22. Vol. XXXVII.

Sorgo Department.

Those of our readers who have any interest in the making of sugar and sirup from northern sugar cane, should send to J. R. Colman & Co., 1026 North Main street, St. Louis, for their illustrated catalogue of the latest improved and standard sorghum machinery, consisting of mills and evaporators of all sizes. The catalogue is sent free to all applicants, and contains much information, both on cultivating and harvesting the plant. Mention this paper when you write.

Loring-Collier-Wiley.

COL. COLMAN:—DEAR SIR: I read, with much interest, your correspondence on the Loring-Collier question. Can anyone, after listening to the able address of Dr. Loring at St. Louis last winter, doubt the sincerity of his interest in the sorghum sugar? I happen to know that Dr. Loring consulted with the President before dismissing Dr. Collier, and I do not believe any subsequent events have disturbed the rest of either the President or Dr. Loring. It is necessary that the Chief Chemist should know the details of the Commissioners' business—whether cane is purchased by the ton or acre?

Dr. Collier's fame lies in corn stalk sugar, and no practical sorghum worker believes that sugar can be made from corn stalks, notwithstanding the extravagant statements to the contrary by Peter Collier. Many persons do not believe a chemist is absolutely necessary to the success of this business. A knowledge of varieties best adapted to localities, soils and climates and best modes of cultivation I believe to be of more value to the business at present than any scientific information regarding its manufacture. This knowledge cannot be furnished the western planter by the Washington cultivator with different soil and climate, who furnishes in fertilizers all the plant can possibly take from the soil. Locating an experimental farm in the Western States would prove a bonanza to cane-growers, otherwise semi-sirup obtained in the West should be treated in vacuum at Washington.

This year the Lafayette Sugar Refinery moves seven miles into the country; has erected suitable buildings; will plant 200 acres, 130 already planted; will also buy all that can be had; are using 200 pounds phosphate with each acre of cane.

Prof. Wiley, who has been appointed Chief Chemist of Agricultural Department at Washington, has severed his connection with this company, a move I very much regret. His scientific and practical knowledge of this business is unquestioned, and with the greater facilities of this company for carrying on its work this season, wonderful results were looked for.

Spring is very backward; had but two good cane-growing days this month, with almost nightly rains.

E. W. DEMING,
Supt. The Lafayette Sugar Refinery,
P. O., West Point, Indiana.

Resolution Endorsing Dr. Loring.

ED. RURAL WORLD: At the request of a prominent member of the Mississippi Valley Cane Growers' Association, I am asked to state what I know regarding the resolution endorsing Dr. Loring. The Convention passed the resolution as follows: Resolved, That the thanks of this association are hereby extended to the Hon. Geo. B. Loring, the U. S. Commissioner of Agriculture, for his most interesting and exhaustive address, and for the sound judgment he has displayed in co-operating both with the manufacturers of sorghum sugar, in the development of their industry, and also with those scientific investigators who have examined the capacity of sorghum producing plants.

The minutes of the proceedings do not show that there was any opposition to the passing of the resolution, but it was passed unanimously. I was in attendance at every session of the Convention, and I have no recollection of any objections to Dr. Loring, or the resolutions being made by anyone on the floor of the Convention. The proceedings published by J. A. Field and Co., for gratuitous distribution was a full and complete report of the entire proceedings, except the resolutions of compliment to individuals. They were omitted, as the design of the publishers was simply to furnish information to those interested in growing and manufacturing sorghum. Yours,
J. A. FIELD,
Treasurer M. V. C. G. A.

The Use of Air.

COL. COLMAN: In answer to B's question in the RURAL WORLD, No. 18, in regard to the use of air to assist in concentrating sirup, I would let him know I got it from Porter's Work on Sugar Cane, second edition, London, 1843. Porter says, on page 234, "Mr. Kneller's plan appears to be very beneficial in rapidly evaporating sirups at temperatures equally low with those employed in Mr. Howard's celebrated vacuum pans, the sugar refined by its means showing the same boldness and brilliancy of crystal, which have for so long a time given a decided preference in the home market to sugar refined in vacuo, and on page 163 "Mr. Godfrey William Kneller" patented an invention for improvements in evaporating fluids, and his plan has been used in an extensive sugar refinery in London. The apparatus consists of a set of pipes which are inserted in the liquor to be concentrated, and which reach nearly to the bottom of the pan. Through these pipes air is forced by means of bellows or any other blowing contrivance, and this air escaping through the fluids serves at once to reduce its temperature and to carry off the watery vapor with much greater rapidity than where the strongest heat is applied under the most favorable circumstances but without this operation.

The Kneller process seems to offer the means for concentrating sirup at a temperature equally low with the celebrated vacuum apparatus invented by Mr. Howard, and with a degree of simplicity which renders it attainable by the sugar planter, which cannot be said of the very scientific but complicated apparatus of Mr. Howard. It is well worthy of consideration and trial, whether Mr. Kneller's patent used in conjunction with that of Messrs. Beale and Porter would not effect all the improvement of which the process of sugar boiling is susceptible, by preventing all possibility of burning and by abridging the time during which cane liquor must be subjected to the action of heat. Beale and Porter's plan consists in using a medium fluid, to which the desired degree of heat may be applied. According to this description I made a pan 30 by 32 inches and fifteen inches deep. This pan is set into another pan so that the bottoms of the two pans are an inch and a half apart. This lower pan is supplied with water, through which the heat is applied to the upper pan. There is a set of pipes with over 5,000 very small holes not over one sixtieth of an inch in size, the holes are on the lower side of the pipes; the connection of a pair of 36 inch bellows is made by one and a half inch pipe. I calculated to put at least thirty gallons in this pan for one batch, but found that it took more power to force the air through the sirup than I could get with my bellows. These bellows I made only for an experiment. I used oilcloth in place of leather, and they leaked. I was afraid it would burst so I could put only about fifteen or sixteen gallons in the pan. I think a good pair of blacksmith's bellows 48 inch will answer the purpose. The sirup ought to be clarified very well before it goes into this pan, or it will foam up so that it will run over. The sirup finished off in this pan has a lighter color. I use lime. I could raise quite a lot of steam by 150 degrees Fahrenheit. I am only a beginner in this business, and commenced two years ago, only on a small scale because I knew I would have to learn. I made this pan last year chiefly to experiment with, and I am satisfied with the result.—Yours respectfully,
WILLIAM L. Jarratt, Minn. May 26.

Lime—Rubber Hose, &c.

In response to the gentleman inquiring if lime is useful for defecation I would state that at least ninety-five per cent. of the sugar manufacturers of to-day use it. Some of the refiners use in connection with lime, dry blood for coagulation. There have been experiments made with various alum combinations, but none of these trials resulted in any remarkable success, and the general adoption of lime for defecation speaks well for its practical usefulness.

To the gentleman inquiring whether to convey his cane juice from the mill to the evaporator in a rubber hose, I would suggest that iron pipe be used, each length being provided with hose couplings, so that each piece of pipe can be detached and transported with ease. Should it be necessary, short sections of hose connection can be made at each ex-

treme end by the mill and evaporator. Size of pipe or hose depends entirely on the quantity of juice to be conveyed per day or hour. There is no special objection to rubber hose in my opinion except the cheapness and durability of gas pipe. If rubber hose must be used, however, I would use the best quality of four-ply hose manufactured.

I will be pleased to reply to any inquiry, and give any information that I am able to impart.

HENRY STUDNISKZA,
1210 Monroe St., St. Louis.

By the way, our sorghum readers will do well to see Mr. Studniska's advertisement in this issue. It may supply many with something they want.—Ed. R. W.

The Use of Rubber Hose.

COL. COLMAN: In answer to the inquiry of C. G. S. of Trenton, Tenn., in your No. of May 24th, I will say I have used rubber hose for both cold juice and hot semi-sirup, and find no objection whatever to its use. Two-ply hose is heavy enough and one inch of calibre is amply sufficient to conduct juice for 100 gallons of sirup in twelve hours.

Season is extremely cold and backward, farmers have had to plant over a great deal of their corn. About double the acreage of cane is being planted this spring, as compared with last year.

A. S. FOLGER,
Washington, Iowa.

Letter From Texas.

EDITOR RURAL WORLD: As I am receiving a great many letters in relation to the Smouse's Palace Self Skimming Evaporator, made by Smouse & Sons, Mount Pleasant, Iowa, I would like to make a statement through the columns of your valuable paper for the benefit of those who may be interested in getting the best there is in that line. I put in a 22 foot long by 3 foot wide copper bottom, Smouse's pan, last June, in place of my 12 foot Cook, run it through the season from June 19th to Nov. 15th, whenever I had cane to work, made over 3000 gallons of sirup, and I think had ample time and opportunity to test it thoroughly; and I do not hesitate to say that nothing could induce me to use any other pan in its stead that I have ever seen or read of. I used in connection with it, one of Hedges' Bagasse burning sets which also gave me perfect satisfaction. I have taken off dense sirup 228 F. at the rate of 20 gallons an hour; about an average run was 12 to 15 gallons per hour. I would not be without the Self Skimming Attachment for the cost of the Pan, as it not only saves labor, but also protects the operator from the scalding steam of the first stages of evaporation. I will with pleasure answer all questions, if the inquirers send stamp to pay return postage. Our spring has been backward, but very seasonable, and crops of all kinds, though some three weeks later than usual, are as fine and promising as I ever saw them. Planters are generally well up with their work, dewberries and plums are ripe and abundant. Other fruits promise well, grapes and peaches especially. My apple trees are so full of fruit (as large as walnuts) that it will have to be thinned out. Respectfully yours,
HENRY B. RICHARDS,
Lagrange, Texas.

Cane in Texas.

COL. N. J. COLMAN: Having seen nothing in your valuable paper from this part of Texas, I have concluded to write a few lines. We have had and are still having a good deal of wet, cool weather; however, crops generally looking fine. I am especially interested in your Sorgho Department, as I am engaged in the business of growing cane and making sirup. I made 1833 gallons last season and expect to double that amount this season. I am anxious to see the day when we will make all our sirup and sugar at home. My cane is six inches high and growing fine. This is a country for cane; we can grow the Northern varieties, also Southern Ribbon cane and have a longer season for working up than you of the North. Therefore if I could induce men of means to go into the business with me and establish a central Steam Sugar and Sirup factory, we could do a good business as there is no establishment of the kind in all this country. Farmers could then be induced to grow cane and have their sugar and sirup made at home and do away with the ruinous practice of raising all cotton and sending abroad for sugar and sirup. You are doing a good work continually stirring the farmers up to raise their own sweets at home, also bread and meat, vegetables and fruits; may you long live for usefulness in your noble calling.
TAYLOR A. Honey Grove, Texas, May 21st, 1883.

Cane in Ohio.

COL. COLMAN: I have been engaged in making sorghum sirup for fifteen or eighteen years, in fact ever since I was a small boy, making from 300 to 3,000 gallons each year. Last year was an extremely bad one for sorghum here in Ohio, it being too cold and wet—though what matured was very good sirup—selling from 65 to 80 cents per gallon. The demand could not be half filled even at these prices, but that was owing to there not being any fruit for the last two years. As a general thing there is no demand here for sirup.

Now, Mr. Colman, I want to ask a few questions, as I need information. I propose planting a good deal of cane this spring, and what I want to know is this, "Where can I find a market for my sirup, and at what price?" "What three kinds of sorghum would be adapted for central Ohio, for early, middle, and late, so as to come in turn to work up for sirup only?" "Also, where can the seed be obtained, and at what price?" "Where can I get Mr. Hedges' work on sorghum, and what will it cost me?" Success to the RURAL, especially to the sorgho department. Your paper is highly appreciated at my house.

JOSEPH A. New Carlisle, Ohio.
We can send you Mr. Hedges' book, price \$1.

Thrashing Cane Seed.

I have seen several inquiries in the RURAL about the best way to thresh cane seed. We feed all our seed without threshing, except to young poultry. In that way stock will eat largely of the forage that is with the seed. The best way I have found to thresh by hand is with an old-fashioned flail on a barn floor or some such place. In that way, a good man can thresh and clean 20 bushels a day. If a large quantity is to be threshed, a ten horse power threshing-machine is best. In any case give it a thorough cleaning with a fanning mill before planting with a planter, and have all broken pieces and chaff, &c., that will not go through the seed plates taken out. I had considerable trouble in planting 20 pounds of seed this spring that I sent to Kansas for; it is represented to have all the imaginable good qualities that a person could desire. One quality I did not admire was, it had so many beads on it I had trouble in getting it through the seed holes of my two-horse planter. Seed looked as if it had been stripped or pulled off by hand.
O. C. B. Fairbury, Neb.

One of the Kind We Like.

N. J. COLMAN, Esq.: I am a self-constituted agent for your valuable paper. I lend my paper and try to interest my neighbors in cane culture, and in manufacturing sirup and sugar. I have been raising and manufacturing for five years in a small way, and regard the RURAL WORLD almost indispensable, worth five times its cost to any one living in this part of the Old Dominion. Yours respectfully,
J. HERVEY, Chase City, Virginia.

Sorghum Instead of Corn.

In writing to the secretary of the Kansas State Board of Agriculture, Mr. N. C. Merrill, of Clarinda, Ness county, Kansas, says: "I have for four years been experimenting with sorghum as a substitute for corn for stock feeding purposes, and have had especially, this late season, extremely satisfactory results. The Early Amber and Kansas Orange varieties are the best, and the more thoroughly cultivated, the better the crop. Probably the most satisfactory way to plant is to take a common grain drill and stop up two holes, and leave one in every third hole to drill with, and then go over the field twice with a smoothing harrow before ordinary cultivation begins. I also find the drill used in planting is equally as good to cultivate with, by taking the hose used in drilling, and I go over it two or three times—more for the sake of moisture than to kill the weeds, as the sorghum will very soon choke out the weeds. Begin to feed as soon as it is two feet high, and by the time it begins to head out, hogs and cattle will begin to take on flesh very fast. Just as the lower part of the head is ripe, cut with a mowing machine, with a rake attachment, and then put in shocks. It costs \$1.25 to \$2 per acre to put it into shocks. From 500 to 800 pounds of beef (live weight) can be realized from an acre, in September, October and November, using no other feed whatever. I realized at the rate of 1,100 pounds of pork to an acre in September, and 700 pounds in November. Hogs will fatten very fast from July to September, and from December until spring, with a little range, will keep in a good growing condition. The larger and coarser stalks, the better for hogs. Sorghum is really our best corn in this part of the State."

The Manufacture of Sorghum Sugar.

The New York Herald says: One branch of the Massachusetts legislature has already passed a bill granting farmers a bounty of one dollar per ton on such sugar beets, sorghum or sugar cane as they may deliver to mills, presumably to be made into sugar. The bill has some defects of construction that may kill it, but it is interesting as showing the willingness of the State to encourage desirable "industries" at its own expense, instead of imposing part of the cost on portions of the country that are not at all interested or benefited by the specially fostered industries. There is nothing illogical about State bounties to farmers, especially in a country that gives an indirect but very large bounty to nearly every manufacturer. A State generally is small enough to be at agreement about economic points that have no partisan bearing. If its people choose to encourage any particular industry at their own expense they have full right to do so; but if any one is to be protected, in Massachusetts or elsewhere, the farmers, who really are the hardest worked and worst paid workmen in America, should not be forgotten.

The Boston Cultivator upon the same subject says: "We are gratified to note that our Massachusetts legislature has passed the bill granting a bounty of \$1 per ton to growers of sorghum or beets. We only regret that this legislation comes too late to stimulate this industry for the current year. Another season we are certain that sorghum culture will be an important branch of farm economy in Massachusetts." Sorghum raising and manufacture of sirup and sugar therefrom has been tested in this section, and there can be no doubt that it can be done successfully and profitably. Mr. John Donnelly at North Scitoba has a mill for expressing the juice and apparatus for evaporating it and converting it into sirup, and the business in his hands has proved a complete success. We shall be glad to see the success of sorghum raising extended, and the profit it affords taken advantage of by our farmers generally.—Oswego, N. Y. Times.

Agricultural.

Larring Corn.

COL. COLMAN: Scrape and make a clean place, then pour half a bushel shelled corn down, take about one pint coal tar, and holding it up high enough, it will string out like a thread (small or large, as you desire); string it in this manner all over the corn, then take a hoe and work as though mixing mortar until all the grains are smeared, then take dry ashes or dry sand and sift all over it. This will dry the corn and make it easy to plant. Coal tar is best; no kind of insects will bother it; no heating, no hot water business. If well tarred it will stand a great deal of wet weather. I have known it this spring to lay in the ground three or even four weeks and come up. The tar process makes it late coming up, but is safe and effectual. This has been used in Texas for years. After a little experience anyone can prepare a great quantity in a short time.

I write this in answer to "A. H. T.," who asks information on the subject. My orange cane is a little backward this year, but consider it promising. Crops generally are good, considering the year. I made splendid sirup last year and some sugar, and hope to do better this year, having some experience. I know when and how to strike. Success to your honor and the cane industry.
Wm. W. H. Westfield, Texas.

Wayne County, Mo.

EDITOR RURAL WORLD: Having noticed inquiries about Wayne county, Mo., in your paper, and as I have just returned from a trip to the county, I thought I would write a few lines to you about the county. I was favorably impressed with the people and found them ready and willing to give strangers any information they could. The county is not as rough as I thought it would be, and the farms, as a general thing, well fenced and fair improvements on them. One feature about the farms that surprised me was the farm gardens. On all the farms the gardens were fenced and neat and well filled with all kinds of vegetables. Land is higher than I had been told, although still low for the quality. Improved farms range from \$10 to \$20 per acre; I did not price wild lands. The county is Democratic, but there is no hard feelings towards Republicans. If I can sell here I am going to settle in Wayne county this fall, as I like the climate, people and country. I will recommend any person going to Piedmont to call on Mr. Hamilton, the postmaster, and Mr. Harris, of

the Piedmont Leader, both of whom I am under obligations to for their kindness in furnishing information about the county. Piedmont is a thriving place and show that the people are energetic and prosperous.
MAC. Litchfield, Ill., May 17, '83.

Origin of Blue Grass.

Plainfield (Ind.) Progress: It may not be uninteresting to our readers to know that blue grass, so famous in Kentucky, was first raised in Indiana at a little Indian village called Miana Village, on White River, in Hamilton county. In the year 1781, John and William Connor were stolen by the Indians from Pittsburg, Pa., and brought to this village. John here became the chief man among the Indians, and through him we learn that blue grass was a native of what is now Hamilton. In 1810 as General Harrison's army was returning south, they took quantities of it to Vincennes and Kentucky, and from there it spread. Judge Finch, of Indianapolis, has often been heard to corroborate this statement, and it may be accepted as correct that blue grass was first raised in what was then known as the Northwestern Territory, now Indiana.

Messrs. Lawes and Gilbert, of England, in their experiments, found that heavily-manured soils retained the depth of thirty-six inches many tons more of water than adjoining lands not so heavily manured. And in experiments with the spade it was found that where the soil was dug up to the depth of eighteen inches, and heavily manured, the crop did not suffer drought, although the crop on the adjoining plots were all dried up. Lawes and Gilbert also found that when the manure was heavily applied, and turned over to a good depth, the water did not go through to the drains nearly so rapidly as on land not so heavily manured or so deeply cultivated. In both cases, where there was a large percentage of vegetable matter in the soil, it acted as a sponge, retaining much of the water which soils differently constructed allowed to pass through. Droughts we cannot prevent, and it behooves us to guard against their injurious effects to the best of our ability. To this end the land should be manured highly, cultivated as deeply as the depth of the soil will allow, and plenty of muck or vegetable matter, in the form of green crops, added to the soil.

A writer in the Scientific American says, "We clean our premises of the detestable vermin, rats, by making whitewash yellow with coppers and covering the stones and rafters with it. In every crevice in which a rat may go we put the crystals of the coppers, and scatter in the corner of the floor. The result was a perfect stampede of rats and mice. Since that time not a footfall of either rats or mice has been heard around the house. Every Spring a coat of yellow wash is given the cellar as a purifier, as a rat exterminator, and no typhoid, dysentery or fever attacks the family. Many persons deliberately attract all the rats in the neighborhood by leaving the fruits and vegetables uncovered in the cellar, and sometimes even the soap is left open for their regalement. Cover up everything eatable in the cellar and pantry and you will soon starve them out. These precautions, joined to the service of a good cat will prove as good a rat exterminator as the chemist can provide. We never allow rats to be poisoned in our dwelling. They are so apt to die between the walls and produce much annoyance.

Land and grass costs nothing for seed or cultivation. If the crop fails, only the use of the land for one year is lost. If the crop does not fail it is more valuable when fed to cattle, horses and sheep than any other crop. Let us quit shipping corn and oats. Let us keep the mares and heifers. Let the horses and steers form one surplus, butter and eggs the other. Industry will not then be a crippled virtue, and debts will not embarrass our people. The rewards for an intelligent husbandry are ample. The homes of the farmers ought to be a place of content and perfect independence. More intelligence will make less slavish labor, and bring greater returns.

PLOWING UNDER CORN.—G. W. Files, of Maine, has had very satisfactory results in the way of fertilizing poor soil by plowing under sowed corn, and describes his method as follows: "First go over the corn with a common roller, ob-serving to roll the same way I am to plow. This puts the corn down out of the way of the team and driver and is much better than attaching a chain to the draw iron of the plow with a weight to drag in the furrow, as used to be my practice. After plowing, the next thing of course is harrowing, which had better be done with a wheel-harrow, as most any other kind will tear up more or less of the corn; I then complete the seed-bed with the planter."

ST. LOUIS AMUSEMENTS.

The People's Theatre is the only regular establishment now open, and is doing an immense business with the Rents-Santley Company. It will be the last week of the season.

The summer theatres open next week; the Ford Company appearing at Uxig's Cave, in "Iolanthe," and Miss St. Quinten and her company will begin a season at the Pickwick, in her new musical comedy.

Horticultural.

Mississippi Valley Horticultural Society.

TRANSACTIONS OF THE FOURTH ANNUAL MEETING.

The secretary, W. H. Ragan, of Clayton, Indiana, has shown us the advance sheets of this valuable report, which is by the way, the first regular volume of transactions ever published by this young but very prosperous society. The mechanical work and material of this volume is first-class, surpassing in its particular any similar publication of its kind. The contributions are from the pens of the most eminent and thoroughly practical horticulturists of the land, and the subjects treated upon are those of deep interest to all concerned. Besides these valuable papers, a full report is given of the discussions, which followed the reading of each, in which many practical thoughts are presented from a wide field of observation. In addition to the address of Judge Hudson, of New Orleans, and the very able address of President Earle, of Illinois, we find a paper by Major Nowlin, of Arkansas, on the Origin and Importance of the Society; by Pres. J. M. Smith, of Wisconsin, on Strawberries for the North; by Dr. H. E. McKay, of Mississippi, on Strawberries for the South; by Pres. O. B. Galusha, of Illinois, on the Relative Merits of the Wilson Strawberry; by Prof. S. A. Forbes, State Entomologist of Illinois, an illustrated and highly interesting paper, exhaustive in its character, on the Insects Affecting the Strawberry; by A. D. Webb, of Kentucky, on the Best Strawberries for Home Use and for Market; by Hon. F. P. Baker, of Kansas, on Irrigation in Horticulture; by Pres. P. J. Berkman, of Georgia, on the New Peaches, and Newer Fruits for the Cotton States; by W. H. Cassell, of Mississippi, on Peaches and their Culture in the South; by E. P. Roe, of New York, on Small Fruits in the South; by J. T. Lovette, of New Jersey, on Small Fruits; by T. V. Munson, of Texas, on Systematic Horticultural Progress; by Pres. T. T. Lyon, of Michigan, on Horticulture vs. Ruts; by Ex-Gov. R. W. Furnas, of Nebraska, on Forestry on the Plains; by Dr. J. A. Warder, of Ohio, on Influence of Forestry on Health; by Cap. E. Hollister, of Illinois, on Markets and Marketing; by Mrs. H. M. Lewis, of Wisconsin, on Birds in Horticulture; by Mrs. D. H. Huntley, of Wisconsin, on Adorning Rural Homes; by W. H. Ragan, of Indiana, on Insect Enemies of the Orchard; by Prof. Burdill, of Illinois, on an Orchard Scourge; by Maj. Evans, of Missouri, on Raspberry Management; by W. M. Samuels, of Kentucky, on New Apples of Value for Market; by D. B. Weil, of Arkansas, on Persimmons in Arkansas; by Mr. Endicot, of Illinois, on Management of Peach Orchards; by G. W. Minner, of Illinois, on Planting Fruit Trees; by Dr. Stayman, of Kansas, on Scientific Production of New Fruits; by Isadore Bush, of Missouri, on Grape Culture and Civilization; by A. C. Hammond, of Illinois, on Apples for Southern Markets; by J. C. Plumb, of Wisconsin, on the Adaptation of Fruits to Climate and Soil; by Gilbert Onderdonk, of Texas, on the Grapes of the South West, and by Dr. Chas. Mohr, of Alabama, on the Pecan Tree. The report also contains a short historical sketch of the Society, by Ex-Secretary Prof. S. M. Tracy, of Missouri, a full list of members of the Society, representing over 20 States and the Canadian, a roster of officers of national, state and important local horticultural societies, a horticultural business directory and much other valuable matter. The price of this volume, which will contain over 300 pages, will be two dollars, which may be sent direct to the secretary, or to Pres. Parker Earle, of Cobden, Illinois. Those forwarding this amount prior to the 15th of June, will have the double advantage of having their names published in the list of members in the volume. As the Society receives no public appropriations, but depends entirely upon its fees of membership and the sale of its volume of transactions, it is to be hoped that all who feel interested in horticulture will assist in the support of this good work.—From the *Indiana Farmer*.

Old-Time Farming in Pennsylvania.

CHAPTER VII OF R. S. ELLIOTT'S "NOTES TAKEN IN SIX YEARS," SOON TO BE PUBLISHED.

EDITOR RURAL WORLD: The following may be interesting to many of your readers:

The first harvesting I ever saw was on the slope of a hill on Judge Edmiston's farm, where some men were reaping with sickles, now gone out of use entirely, I believe. The cradle was then in use, too, and it was an inspiring sight to see four or five muscular cradlers leaning to their work, and swinging their cradles in unison—definitely dropping the cut grain behind them for the rakers and binders who followed. Animation and suggestion of utility were blended in the scene. It was the poetry of rural work in motion, and very proud of their skill were those cradlers. The man who could hold the lead was a sort of hero, while the ambition of the others to equal him had the pleasant result of helping on the work. My good father always applauded the efforts of the emulous and smiled on the strife for excellence, that brought down his wheat and rye the more rapidly.

Harvesting meant severe hard work, but not a little jollity and enjoyment. It was a jocund season; there was often much merriment, and many a meagre joke was greeted with fat laughter. The world was bounded north and south by mountains, and though it was open at both ends, few of the people ever got out of the valley, but we had innocent gaiety enough. When at last their bodies were laid to rest, their souls mostly went upwards; for Thomas Paine was forgotten, and there was no Col. Ingersoll to rob them of hope and give nothing in return.

In the present age of "Prohibition," the reader may be shocked to learn that in the harvest fields of central Pennsylv-

vania three score years ago, the use of whisky was almost universal. Neighborhood distilleries furnished a limpid liquid obtained from rye, and the general rule was for each farmer to get "a bar'l o' whisky for harvest." The fluid was sometimes colored by putting toasted dried peaches into the barrel, but it was still in a very raw condition.

Once in my life I got drunk. I was but a child, and having straggled to the harvest field, was told to stay in the shade of the tree, where the whisky jug and water pail were sheltered from the sun. Having seen the men pouring from the jug into the tin cup and drinking, I wondered what it was that was so good they snatched their lips after partaking of it. So, after they left, I poured and drank. The result was a "solitary drunk." I think there was no exhilaration at all, but dreadfulness of nausea, and a very sick but unconscious child was carried home to sleep himself sober. Whether or not there was any moral deduced from this occurrence by the use of a switch I do not recollect, but probably there was, for it was not customary then to spoil the child by sparing the rod. I have ever since been opposed to the use of whisky in harvest, and that little indulgence in grog has lasted me more than sixty years, as I have never been carried home from that day to this.

Although whisky was so liberally used in those old days, I cannot recollect that there was much drunkenness. Certainly the results of whisky drinking were not of violent character, as I cannot recall any murders or serious affrays during my boyhood. Fist-fights were expected on the 4th of July, on "Mustard day," when the militia paraded, and at elections, but no deadly weapons were used, and the combatants were usually good friends again when sober. The fights grew out of ambition rather than animosity, and homicide was then so rare that a single murder would convulse with horror the entire commonwealth.

Even in my boyhood the question came up, whether harvesting might be done without whisky, and the notion spread that it was worth while trying the experiment. One farmer after another substituted buttermilk, switchell (water with molasses in it) and a dash of vinegar, and other harmless beverages. That was before the day of the "pledge," but the experiment succeeded.

Farmers of the present day may wonder how the crops could be gathered without improved mowing and reaping machines. But our fields were not large, and I think there was never any hay or grain lost for want of harvest hands and implements. Many mechanics and others from the towns took to the fields, as the daily wage was tempting (even if paid in grain) and they liked the fun and jollity of the harvest season. Everybody knows how wonderfully harvest machines operate now, and they are needed on the great prairie farms. Dairymen could hardly save their wheat on that big farm in Dakota with the sickle and cradle, but he might use the heading machines, described by Pliny as used in Gaul at the date of the Roman conquest. This was the prototype of the headers used in California—only in the Gaul machine "the cart before the horse," as the machine was pushed by an ox in shafts.

Most farmers in our region, as in other parts of Pennsylvania, had barns large enough to hold all their hay and grain, and if barn room was short, they would carefully stack it, with generally a thatch cap to shield it from rains. The cap rested on four posts and could be raised up as the stack grew in height. Nothing better has ever been contrived for out-door storage of grain in sheaf. The barns all had plank threshing floors, on which the wheat was "amped out" by hand, and many a weary ride round and round the barn floor I have had to endure, sometimes nearly frozen, as this work was mostly done in the winter season; but boys then went through such experiences, and did not know enough to complain. It was an ignorant age, and we did not recognize hardship even when undergoing it. I used to try to stand up on the horse, like the men in the circus, but could not manage it well, and at last concluded that I was not born for such a "ring," nor have I figured out any advantage in any "ring" in all the long years since. My circus pranks, trying sometimes to play clown, used to so disgust our trusty old farm hand, Hugh Ramsey, that a picture of his face, with its wrinkled expression of contempt for all circuses and clown-imitators, would beat anything Cruikshank ever designed.

Instead of burning our wheat straw, as eastern farmers do, we had long racks in the barns filled with it for the cattle to eat at will. They thought it worth eating and did not starve. The racks are generally made of rails crossing each other, resting on a pole, with their ends in the ground. We always had abundance of manure to haul out at the proper season.

Rye was threshed with flails, now gone out of use, and the straw was often used for thatching. It was a good rule for the farmer to have a good rack and sheds. Rye straw was also cut short and mixed with rye meal (chopped rye we called it) for horse feed in summer. We also used oats for horses, but rarely corn, except in cold weather, and then fed in ear. We had a notion it was too "heating" for summer use.

[TO BE CONTINUED.]

The Peach-Scab.

In response to Mr. D. S., of Lancaster City, Mr. F. H. Z., and Dr. G., of Columbia, and others, we would say that the peach twigs and branches they sent us, are badly infested by the "Peach-Scab," or the *oculus* or "scale-insect" of the peach—*Lecanum Persicum*—and, if they desire to know "what to do about it," we would simply recommend the cutting off all branches that are as badly infested as those they sent us, even should it be necessary to trim them as short as the Indian trimmed his dog's tail, when he cut it off immediately back of his ears; for, if every individual scab only reproduces a single young one, the present season, there would not be sufficient surface on the trees and branches to allow them "standing room." This is by no means a new enemy to the peach; they have appeared at irregular periods in various parts of Lancaster county during the last ten years or more; and, two years ago, they were "fatally epidemic" in the city of Reading, Pa.

They are very local in their habits and travel very slowly, frequently being confined to a single tree in an enclosure of trees, for several seasons, especially if the neighboring trees are not to the leeward of them; or, one enclosure may be infested throughout, whilst another, only separated by an ordinary closed fence,

may be entirely free from them. Of course, the little brown, intensely convex scales now upon the branches will not move from their present locale; but, when the young are hatched from the eggs, which these dead, or dying, female bodies conceal, the youngsters will travel to new quarters on the same tree or branch; and then too they may be carried to other trees that are to the leeward of them.

Countless numbers of them must perish every season through meteorological contingencies alone; for, if a drenching rain should occur about the period they are excluded from the eggs, millions of them would be carried down to the earth, by such a deluge, from which they never would rise.

Artificial drenching—even with water—at such a period would have a similar effect. But after the young have located themselves, introduced their beaks into the young wood, and become degraded to a mere "scale," or "scab," neither "winds nor weather" will have any effect upon them. They however succumb to applications of grease, or oily substances. Coal oil, or even linseed oil, are said to be injurious to the trees. But, when a whole orchard is infested, such an application seems impracticable.—*Lancaster Farmer*.

Southern Fruit Prospects.

MAYHEW, MISS, May 3d.

EDITOR RURAL WORLD: In my travels through the South I have found no place where the people are so enthusiastic over the fruit and vegetable traffic and prospects as here. The feeling existing arises no doubt from the fact that the enterprising citizens of this pleasant little burg are just embarking in this industry, stimulated thereto mainly through the favorable reports and profitable experience of others in the business in the South in the past two years. Should any of these sanguine cultivators fail or fall short of their expectations in results, a discontinuance of the business will likely follow, for I have met with a number of strawberry growers in the South this season who suddenly abandoned their labors because meeting with disappointment the first season. The experienced hands in the fruit business meet with such unpleasant results occasionally, and the novice should be prepared to meet and battle with more of them.

Col. Burgin, who has a thousand acres devoted to cotton is also a successful fruit grower, making a specialty of peaches and pears. His son, Capt. Burgin, is also extensively engaged in peach culture, and has a good crop this season that will net a good deal of money. He has his choice of the New Orleans, Chicago and St. Louis markets, and will probably patronize all. A dozen other parties at this place are going into vegetable growing with a vim, and are achieving nothing undone to make it a success from the start. Irish potatoes are a specialty.

A little distance further north we find West Point, where fruit-growing has been conducted in a limited way for a number of years. Col. J. J. Mhoon has probably the widest experience of any body in this section. Reviewing his extensive grounds, gardens and fields, I discovered the greatest variety of trees and plants, fruit and ornamental—shrubbery and roses, etc.—I have seen anywhere. He is a great experimenter, and could reveal a great fund of interesting information, the results of his labors. The Col. regards peach-growing unprofitable in his vicinity. Says he failed to get three good crops in ten years. On his premises are a number of varieties of the grape, most of which are turning out wine every year, and in the cellar of the residence stored away are some excellent samples of wine, notably the Scuppernon.

My next call was on your friend, Dr. J. M. Heard, who has been a subscriber to the RURAL for twenty years, and what he does not know about horticulture and kindred matters would not make much of a volume. The Doctor is far advanced in years, but still hale and hearty. His family, long since grown up, are all married and doing well, and since the loss of his wife, a few years ago, feels very much alone in the world at the old homestead. Previous to the war the Doctor was very wealthy, the manager of a fine estate, and had fortunes invested in negroes. He was amongst the earliest volunteers in the Southern cause, and never returned home till after the surrender. He had to begin life anew, everything portable on his place having been carried off during his absence. However, now in his declining years he is very comfortably situated, his home, though somewhat quiet and lonely, is almost concealed amongst the mass of trees, flowering shrubbery, roses, honeysuckles and jessamines which grow and bloom here in the greatest profusion. He has a regular wine vault, where can be found a dozen different kinds of wine from the grapes of his own growing. The Doctor is evidently an adept at wine-making. He kept the wines, testing and sampling his various brands until the objects, bottles and casks had doubled the original numbers and led to a confusion of ideas so that nothing further can be added.

ROOSTERS AS MOTHERS.

Among the novelties on the Doctor's premises that attracted my attention was the sight of half a dozen stately cocks strutting around, each having with him a large brood of chickens in which he apparently took the deepest interest, manifesting that care so peculiar to the hen. Indeed, he threw around them every motherly protection, called them and shielded them when necessary, and under his broad wings he cared for and covered not only the product of one setting, but that of two or three, unlike the hen, taking under his kindly protection all the little chicks that were offered, and ministering to the wants of each impartially.

The natural mothers of those little chickens had their little ones taken from their nests at night, and their place supplied with another dozen of eggs upon which the deceived and unsuspecting hens still continued to set. It was a splendid scheme to turn out chickens rapidly and utilizing the cocks in a most

commendable way. I may add that the birds who were thus deputized to care for so many of the young were all capons and admirably fitted for their new duties. Dr. Heard intends having one of these flocks at the next St. Louis Fair. P. M. K.

Horticultural Notes.

Mr. W. H. Ragan, of Clayton, Ind., Secretary of the Mississippi Valley Horticultural Society, in a private letter to us, says that the volume of transactions of that society about to be published is one of the most valuable of its kind ever issued. He further says it is a subject of regret that its circulation is to be bounded by the narrow limits of its membership. There should be thousands of copies of it put into circulation. The receipts from all sources up to this time will only cover the expense of publication. Please do what you can in extending its meager list of members, etc.

REMARKS—This we will do cheerfully, and publish your letter to aid in that object, and also the review of the volume by the *Indiana Farmer*. After that review is read, we hope hundreds of our readers will remit Mr. Ragan the two dollars and get the volume as well as aid in a good work.

Commissioner Loring has completely reorganized the forestry division of the Department of Agriculture, and has commissioned four gentlemen to make practical observations in as many sections of the country, the results of which can but be of great benefit. Mr. R. P. Baker of Kansas is in charge of the Southern division, which includes Kansas and Texas. Mr. R. W. Furnas of Nebraska has the Northwestern division, James A. Wadler of Ohio, that veteran forester, has charge of the middle division, which includes Illinois, Indiana, Ohio and West Virginia, and Mr. B. F. Huff has the Northwestern division, including New England, New York, Pennsylvania, New Jersey, Maryland, Delaware and Virginia. These four gentlemen are to report on the following questions: The conditions of the forests; their recuperative power; the value of timber; the quantity of merchantable lumber produced every year; statistics of the timber trade; the kinds of trees grown, and the chances for clothing plains and sterile hills with forestry. They are ordered to report in season to have the result of their labors appear in the next annual volume.

A writer in the New York *Tribune* advocates that great advantage results in training tomato plants erect to an eight-foot rod or stake, well sharpened and set. He claims that fewer plants are needed; those few occupy much less room than if allowed to sprawl about; the fruit is not so liable to rot, and it attains complete size, form and flavor. The plant should be set close to the stake, and the growing stem should be led up quite erect, so as to be able to support the weight of fruit and foliage. No side branches are allowed; each one being nipped out as it appears, but if one is already formed and bearing blossoms, it is best to pinch it off so as to leave but one leaf above the blossoms, and confine its growth to that. A tie at about every eight inches, to hold the main stem to the stake—allowing some room for its enlargement—will enable it to carry its burden safely, if the stake is firm enough to resist the wind.

The Coddling Moth.—Of this pest a Massachusetts farmer writes: "The coddling moth is the true enemy of the apple. How are we to get rid of him? If we can exterminate him from our own orchard, we may have little fear, as the insect does not migrate; his habits are purely local. I scrape all the rough bark off in winter, and the pest perishes, as it is under the rough bark that it lives snugly housed. I find the best thing to remove the bark is a trowel and damp weather the best time for the work. After scraping give each cultivation, and in the spring at blooming time give the trees a good wash of soap, sulphur, coal oil and water added sufficiently to make a paste, to be applied with a brush. When the young fruit begins to fall, turn in the hogs. You have done then all that man can do."

A novel method of dealing with the coddling moth, the parent of the apple worm, has very recently been practised to good advantage. There are two broods of worms in one season, often three. The first brood is hatched from eggs which are laid in the "blow end" of the apple soon after the flower drops. The young apples at this time stand erect on their stems and if Paris green and water be syringed on to them it will fill up the "blow end" and kill off the whole of the first brood of worms as soon as they hatch and begin to eat. Later the apple turns down, and all the poisonous matter is washed away before it ripens. The second brood cannot, of course, be treated in this way.

A bit of wire about the size of a knitting needle is an efficient weapon with which to attack the apple tree borer, or the borer in any other tree. Look around the butt of the tree, near the ground, and when you find his tracks, just insert the wire and push it into the hole until it reaches his retreat. It effectively prevents his doing any more mischief. Every tree should be examined and treated in this way every two weeks during the growing season. In old trees which have been neglected and which have been badly bored by these pests, it may restore the tree to vigor more quickly if the holes are plugged with a little grafting wax.

L. H. Bailey of the Michigan "fruit belt," makes a practice of constantly picking off his wormy apples during the season by means of a sharp hook fastened to a long pole. These apples are at once picked up by a drove of hogs. If left to themselves apples will seldom drop until after the worms have left them, and the old idea that hogs devour the worms by eating the apples as they fall naturally is an erroneous one. Mr. Bailey is a practical grower and he finds that the above method pays.

An Invaluable Remedy.—None except those who have suffered all the horrors of Dyspepsia, can fully appreciate the value and efficacy of Perry Davis' Pain Killer, a sovereign remedy for this distressing disease in all its forms; is used internally and externally. Test its virtues. 4t.

DARBY'S Prophylactic Fluid.

For the prevention and treatment of Diphtheria, Scarlet Fever, Small Pox, Yellow Fever, Malaria, etc.

The free use of the Fluid will do more to arrest and cure these diseases than any known preparation.

DARBY'S PROPHYLACTIC FLUID, A safeguard against all pestilence, infection and epidemic.

Also, as a Gargle for the Throat As a Wash for the Person; And as a Disinfectant for the House.

A CERTAIN REMEDY AGAINST ALL CONTAGIOUS DISEASES.

It neutralizes the most noxious odors and gases. Destroys the germs of pestilence and septic (putrescent) floating imperceptible in the air, or such as have effected a lodgement in the throat or on the person.

A certain remedy against all contagious diseases.

Perfectly Harmless, used Externally or Internally.

J. H. ZELIN & CO., Proprietors. MANUFACTURING CHEMISTS, PHILA.

Price, 50c per bottle; pint bottles, \$1.

REMEMBER THIS.

If you are sick Hop Bitters will surely aid Nature in making you well, when all else fails.

If you are constive or dyspeptic or are suffering from any other of the numerous diseases of the stomach or bowels, it is your own fault if you remain ill, for Hop Bitters are a sovereign remedy in such complaints.

If you are a frequenter of a residence of a malarial district, your system against the scourge of all countries—malaria, epidemic, bilious, and intermittent fevers—by the use of Hop Bitters.

If you have rough, pimply or scaly skin, bad breath, pains and aches, and feel miserable generally, Hop Bitters will give you fair skin, rich blood, and sweetest breath, health and comfort.

In short, they cure all diseases of the Bowels, Blood, Liver, Nerves, and Urinary system. \$500 will be paid for a case it does not help. That poor, bed-ridden, invalid wife, sister, mother or daughter, can be made the picture of health, by a few bottles of Hop Bitters, costing but a trifle. Will you let them suffer?

to vigorously push a business, strength to study a profession, strength to regulate a household, strength to do a day's labor without physical pain. All this represents what is wanted, in the often heard expression, "Oh! I wish I had the strength!" If you are broken down, have no energy, or feel as if life was hardly worth living, you can be relieved and restored to robust health and strength by taking BROWN'S IRON BITTERS, which is a true tonic—a medicine universally recommended for all wasting diseases.

501 N. Fremont St., Baltimore

During the war I was injured in the stomach by a piece of a shell, and have suffered from it ever since. About four years ago I brought on paralysis, which kept me in bed six months, and the best doctors in the city said I could not live. I suffered fearfully from indigestion, and for over two years could not eat solid food and for a large portion of the time was unable to retain even liquid nourishment. I tried Brown's Iron Bitters and now after taking two bottles I am able to get up and go around and am rapidly improving. G. DECKER.

BROWN'S IRON BITTERS is a complete and sure remedy for Indigestion, Dyspepsia, Malaria, Weakness and all diseases requiring a true, reliable, non-alcoholic tonic. It enriches the blood, gives new life to the muscles and tone to the nerves.

AYER'S SARSAPARILLA

cures Rheumatism, Neuralgia, Rheumatoid Gout, General Debility, Catarrh, and all disorders caused by a skin and impure blood. It purifies the blood, expelling the blood poisons, and restoring the vitality of the system. During a long period of unparalleled usefulness, AYER'S SARSAPARILLA has proved its perfect adaptation to the cure of all diseases originating in poor blood and weakened vitality. It is a highly concentrated extract of Sarsaparilla and other blood purifying roots, combined with Iodide of Potassium and Iron, and is the safest, most reliable and most economical blood purifier and blood-food that can be used.

Inflammatory Rheumatism Cured. "AYER'S SARSAPARILLA has cured me of Inflammatory Rheumatism, with which I had suffered many years." W. M. MOORE.

"Last March I was so weak from general debility that I could not walk without help. Following the advice of a friend, I commenced taking AYER'S SARSAPARILLA, and before I had used three bottles I felt as well as I ever did in my life. I have been at work now for two months, and thank you SARSAPARILLA the greatest blood medicine in the world." JAMES MAYNARD.

AYER'S SARSAPARILLA cures Scrofula and all Scrofulous Complaints, Erysipelas, Eczema, Ringworm, Blotches, Sores, Boils, Tumors, and Eruptions of the skin. It clears the blood of all impurities, aids digestion, stimulates the action of the bowels, and thus restores vitality and strengthens the whole system.

PREPARED BY Dr. J. C. AYER & CO., Lowell, Mass. Sold by all Druggists; price, 25c, six bottles for \$5.

IT WILL PAY YOU. If you run a Mower or Reaper, to purchase a BOSS Sickle Grinder. It will pay you if you want to handle a reliable Sickle Grinder and one that is sold at a reasonable price, to make the BOSS. More Boss Sickle Grinders are sold every year than all others made. Send for Price List and Catalogue. Agents wanted for unoccupied territory. **POWELL & TOUGLAS,** New Haven, Conn. Main Frs of Pump, Windmill, etc.

SAMARITAN NEVER FAILS. THE GREAT NERVE CONQUEROR

The only known specific for Epileptic Fits. "A" Also for Spasms and Falling Sickness. "A" Nerve Weakness quickly relieved and cured. Equalled by none in delirium of fever. "A" "Neutralizes germs of disease and sickness. Cures ugly blotches and stubborn blood sores. Cleanses blood, quickens sluggish circulation. Eliminates Bile, Carbonates and Scalds. "A" "Permanently and promptly cures paralysis. Yes, it is a charming and healthful Aperient. Kills Scrofula and Kings Evil, twin brothers. Changes bad breath to good, removing causes. Restores life-giving properties to the blood. "A" It is guaranteed to cure all nervous disorders. "A" "Reliable when all other fails. "A" Refreshes the mind and invigorates the body. Cures dyspepsia or money refunded. "A" "Endorsed in writing by over fifty thousand leading physicians in U. S. and Europe. "A" Leading clergymen, U. S. and Europe. "A" Diseases of the blood over a conqueror. "A" For sale by all leading druggists. \$1.50 per bottle.

For testimonials and circulars send stamp. The Dr. S. A. Richmond Med. Co., Props., St. Joseph, Mo.

\$50 IN GOLD! THREE REWARDS

We will pay \$25.00 in Gold to the person sending in the largest list of names who can be spelled by using any of the fifteen letters found in the words "COLMAN'S RURAL WORLD," which appear upon our mammoth engraving "An Australian Scene."

For the second largest list, \$15.00 in Gold. For the third largest list, \$10.00 in Gold. The contest will close August 1st, 1883. If a tie occurs in the lists which entitles the senders to any one of the three rewards, that reward will be equally divided among them.

The Australian Scene is in colors (size 28 x 40 inches—nearly 2 1/2 feet wide and over 3 feet long), and shows the manner of traveling in that country with Ostriches as a motor. Those who compete for these rewards must send us thirty cents in silver or stamps, when this fine work of art will be sent by mail, neatly packed in a strong tube. The engraving is worth far more than this nominal sum, but we desire to secure a record of those who compete for the prizes and also wish to know of those who desire to know of it.

When writing for the engraving and sending your list of words ask for

Circular of Easy Riding AUTOMATIC SPRING SIDE-BAR ROAD WAGON.

(END VIEW OF SPRINGS.) These springs "automatically" adjust themselves to the weight imposed. They have the soft, flexible motion of a long spring and weigh only one-third less than the ordinary springs. They are the lightest flexible springs, to their carrying capacity, ever produced for side-bar wagons. See list of weight and capacity in Circular. They are manufactured from the finest crucible steel.

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THE BATCHELLER Barrel Churn CHEAPEST AND BEST. No iron rim for butter. No wooden staves. All sizes made up to 300 gallons. Lever and Roller Buggies, also all sizes Box Churns for creameries. All goods warranted as represented. One Dairy Churn at wholesale price where we have no agent. Send for circulars to H. F. BATCHELLER & SON, Rock Falls, Ill.

The Little Gem Creamer is the creamer for the home. Good in all climates. Need no ice. No lifting of milk. No straining. Most durable and easily handled, and requires less cooling than any other creamer. Capacity for 24 hours setting, thereby ensuring all the cream. No Creamer has given such general satisfaction to the dairymen. Agents wanted. Send for circulars. WAY & WOODRUFF, Manufacturers, Geneseo, Ill.

Rectangular and Square Box CHURNS, cheap and best. No inside staves. No wooden staves. Six sizes of each kind made. Three sizes of the Lever and Roller maker made. Best material used, and every churn and butter worker warranted exactly as represented. One Churn at wholesale price where we have no agent. Send postal for Circulars. CORNISH & CUTLER, Fort Atkinson, Wis.

WORTH SENDING FOR! Dr. J. H. SCHENCK has just published a book on DISEASES OF THE LUNGS AND HOW TO CURE THEM. It contains full and complete information for all who are afflicted with, or liable to any disease of the throat or lungs. Mention this paper. Dr. J. H. SCHENCK & SON, Philadelphia, Pa. (Write if you wish English or German Book.)

ERRORS OF YOUTH. Prescription Free for the speedy cure of Nervous Debility, Lost Manhood, and all disorders brought on by intemperance or excesses. Any Druggist has the ingredients. Address: **DAVIDSON & CO.,** No. 75 Nassau Street, New York.

WATER-BUILDING MANILLA This water-proof material resembles manilla, is used for roofs, outside walls of buildings, and in place of plaster. Catalogue & Price List sent on request. **W. H. FAY & CO.,** 221

GOOD, cheap boxes in Audrain, Boone, Calaveras, Iowa and Saline Cos., Mo. Good railroads, schools and churches; low rates. J. F. Clark & Son, Mexico, Mo.

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THIRTY-SIXTH YEAR.

BY NORMAN J. COLMAN.

PUBLISHED WEEKLY AT

ONE DOLLAR PER YEAR.

ADVERTISING: 25 cents per line of space; reduction on large or long time advertisements. Address NORMAN J. COLMAN, Publisher, 600 Olive Street, St. Louis, Mo.

(Advertisers will find the RURAL WORLD one of the best advertising mediums of its class in the country. This is the uniform testimony of all who have given it a trial. Many of our largest advertising patrons have used it for more than a quarter of a century, which is the highest possible recommendation of its value as a advertising medium.)

READERS of the RURAL WORLD, writing to or calling upon any one advertising in our columns, will do us a favor if they will say they saw the advertisement in this paper.

We regret to say that the frost on Monday night, 21st May, completely destroyed the grape crop in the vicinity of St. Louis.

The cherry crop in this vicinity is very small this season. Growers at a distance from this market will find here remunerative prices.

UNITED STATES Minister Halderman sends late Calcutta papers to the RURAL WORLD, all the way from his official residence, Bangkok, Siam. Thanks.

MOBILE, Grand Bay, and other points in Alabama growing tomatoes, mourn the loss of the early planting, the plants having been burnt up by a prolonged drought.

The weather during the past week has been wet and comparatively cold. We have had enough rain. Every crop on the farm is very backward and much of it destroyed.

PEACHES are coming daily to St. Louis from Texas, Mississippi and Alabama, and the quality is above the average of early receipts. Mayhew, Miss., is shipping some fine fruit, bringing \$2.00 to \$2.50 per box.

JONES, of Binghampton, the irrepressible scale man, is out with a humorous pamphlet on scales in general and his own in particular. It is pleasant reading and may be had by addressing him Jones of Binghampton, Binghampton, New York.

ST. LOUIS COUNTY is sending to market an immense strawberry crop, the finest fruit placed on the market for years. Shipments from a distance are entirely neglected, and will continue to be overlooked, while this section fills up the market with choice fruit coming in now.

H. V. P. BLOCK, of Aberdeen, Pike county, Mo., sends us his catalogue of thoroughbred Jersey cattle, grade Jersey heifers for milk cows, thoroughbred Percheron horses, high-bred Percheron horses, trotting horses, Berkshire and white Yorkshire pigs and Southdown sheep. Those wanting stock may address him for a copy.

MESSRS. TRUMBULL, REYNOLDS & ALLEN, of Kansas City, are manufacturing and will have ready for fall sowing a new all iron field roller which they will offer at the unprecedentedly low price of \$45. It is made of No. 12 iron plate, weighs 600 lbs. and can be weighted as heavily as one pleases. There is no longer any excuse for sowing in a field of clods.

THAT fine wheat-growing country along the Cairo and St. L. R. R., extending two-thirds of the way from this city to Cairo, presents a most gloomy picture to the traveller as well as the grower. A half a crop would evidently be too high an estimate to place on it. In some fields there is not one-fourth of a crop, while others may have two-thirds of the average yield.

THE Orange Judd Company of New York send us "The Soil of the Farm," a hand book of the processes included in the management and cultivation of the soil. The contents of which are the origin and formation of soils, physical properties of soils, composition and fertility of soils, soil improvement, land drainage and irrigation, manures, etc., cloth 12 mo., price \$1.00.

WE have received from the author "Feeding Animals," a practical work upon the laws of animal growth, specially applied to the rearing and feeding of horses, cattle, dairy cows, sheep and swine, by Elliott W. Stewart, one of the editors of the National Live Stock Journal; late non-resident professor of the Principles of Agriculture in Cornell University. Published by the author, Lake View, Erie County, New York; price \$2.00. A useful and desirable work, which many who remember the letters signed "Alimentation," under the title of "Feeding Animals," will be glad to see in this handy and permanent form.

THE prospects for a supply of grapes in this vicinity are very poor indeed. Fifty miles south of St. Louis on the Cairo and St. Louis R. R. and the territory between on the same road, produce large quantities of grapes. While riding over this line a few days ago we discovered such a surface of brown leaves in the vineyards as recalled Autumn scenes. Not a green leaf visible. Further South were a few small vineyards that appear green and secure, apparently escaped unharmed. At Clarksville, Mo., we understand some injury was inflicted by a late hail storm. A few vineyards in St. Louis county are all right, while the majority are ruined.

DAIN'S HAY STACKER.

This splendid machine advertised in this issue is sufficiently conspicuous to engage the attention of every reader. The advantages claimed for it by the manufacturers justify every farmer having hay to save in getting one of them. These claims are authentic and guaranteed. Readers are requested to see the list of agents handling it and to call on the one nearest them, or address Trumbull, Reynolds & Allen, the manufacturers, Kansas City, Mo.

THE JUNE RACES.

Capt. Lew Clark, the very able and efficient secretary of the St. Louis Jockey Club, is kept exceedingly busy making preparations for the coming races, and the magnificent inducements offered will certainly make the meeting one of the very best ever held in this country. Large instalments of leading racers are now arriving at Cote Brillante, and within a week a morning visit to the track will be found replete with great interest and amusement. Capt. Sam Ecker has proved a most successful presiding officer, and his work is telling for the good of St. Louis racing interests.

ARISTOCRATIC LAND OWNERS.

It is astonishing what large farms in the United States are owned by titled Englishmen. Of individual owners there are Sir George Reed, 2,000,000 acres; Earl of Dunmore, 100,000 acres; Earl of Dunraven, 60,000 acres; Duke of Sutherland, 400,000 acres; the next largest farms are owned by Phillips, Marshall & Co., 1,300,000 acres; heirs of Col. Murphy, 4,100,000 acres; H. Dixon, 12,000,000 acres; Standard Oil company, 1,000,000 acres, and scores of others. Nine men own a territory equal to that of New Hampshire, Massachusetts and Rhode Island combined. Then there are the great railroad corporations, whose free gifts of land from profligate Congresses amount to upwards of 200,000,000 acres. Eleven of these corporations have been given 120,000,000 acres. The Northern Pacific road has received the biggest slice, 47,000,000, and the grants have ranged all the way from 1,000,000 acres and upwards. Farmers of the United States will warm up to this matter when it is too late.

Notes-Correspondence.

—If you will inform me where I can procure a couple of asses, for breeding purposes, you will greatly oblige.—Respectfully, Samuel E., Norton, Kansas.

—The thirteen Plymouth Rock eggs sent me by Colman's RURAL WORLD were all good. One was broken a few days before hatching with a chick in it, another was crushed by the hen, before getting out of the shell. Eleven nice chicks came out of the nest. Am well satisfied, of course.—Thos. H. Hicklin, Gallatin, Mo.

—The question is often asked, why the western farms do not produce as many bushels of grain to the acre as the eastern farms, and Messrs. Mitchell & Sons, of St. Louis, claim, it often happens because the farms are not well drained. These gentlemen have issued a book on this subject, which our readers can have sent to them free of charge. Note the advertisement on another page, and write for circular.

—One of the greatest improvements in farm machinery is the Bean Hay Stacker, manufactured by J. H. Bean & Son, Decatur, Ill. For generations, people had pitched hay on the wagon and stacks by manual labor. The first exception to this rule was the invention of Jacob H. Bean, called Bean's Hay Stacker. It has a wide-spread reputation, is a machine of the greatest merit, and is gaining favor every year. The rakes have flexible teeth and are really the only successful rake of the kind made. For further particulars address as above.

—I find that in the last number of the RURAL WORLD, in my additional remarks to Col. A. W. Pearson's treatise on diseases of the grape, your compositor makes me say "vine" for "wire" and vice versa. This makes such a confusion of it that it is hardly possible to understand what I wanted to say.—Respectfully, J. Balsiger.

—Is there any machinery to which a saw can be attached, to saw down timber. Want to clear land with considerable young timber on it and would like to saw down at the ground, in order to get the stumps out of the way.—M. O. B., Star View, Mo. There is a saw for cutting down trees, which we have seen advertised, but do not know who has it for sale.

—Our farmers are very backward. Wheat is very sorry, large crop oats sowed and promise well, but little corn planted yet. An unusual amount of clover, grass and tobacco seed has been sown. A very large crop of Irish potatoes has been planted. The acreage of cotton will be smaller than usual. Would like to have the address of a company, in St. Louis, that makes barb wire.—J. T. Iron, M. D. Paris, Tenn. Address L. M. Ramsey Manufacturing Co., St. Louis, for barb wire.

Fruit and Crops in Southern Illinois.

COL. COLMAN: I have been into three counties the past week, and I find the farmers all about agree upon the statement, that the wheat crop is a failure this year. Many of the farmers will not move their harvesting machines out of their sheds. Some of the Washington County farmers claim that they will have some wheat, but not to amount to much. But as a general thing, everything bids fair for a very good crop of fruit, although the frost of last week made its mark. But the trees still have about all they could bear from the present outlook. The Central strawberry growers claim, that the frost damaged the strawberries fully one-fourth and some one-third, but as it is, they will have a big yield, as the general opinion is that the vines never were fuller. They have begun to pick and make light shipments within the last few days; they will be in full force in a few days. On the 24th inst., the fruit train pulled 12 cars of berries through bound for Chicago and the northern markets, and the Express Company got quite a lot of fruit also. Raspberries and blackberries, so far, promise a good crop along the I. C. R. R., in this part of the state. Centrals men say that there is about 700 acres of strawberries in their neighborhood. While we lose our wheat crop a great many of the farmers are plowing up wheat and planting corn. Early planting is coming up very well considering the cold, backward spring. We feel pleased about the prospect of apples and peaches.—Yours most respectfully, W. B. Wright, Mount Vernon, Ill., May 27, 1883.

The Cattle Yard.

The Jackson County Sale.

Eighteen of the breeders of Shorthorn cattle, of Jackson county, Missouri, united in a sale last week at Kansas City, being the eighth annual sale made by the enterprising breeders of that county. We report below 166 animals sold at an average price of \$166.35. Of these 79 were purchased by Kansans, at an average of \$157, and 87 to Missouri, at an average of \$175. From Missouri, therefore, they drew \$15,215, and from Kansas \$12,400, in all \$27,615.

The RURAL WORLD was the only St. Louis newspaper that properly announced and represented the sale before it took place, and the only one having the enterprise to attend and report it. We met at the sale very many of our good friends and subscribers, and are pleased to know that the parties to the sale recognize the service we have rendered them. The attendance was quite large, and though the weather was cool it was fine. Many of the animals were purchased by well-known breeders, but the majority of them went to those who had few if any before, thus adding largely to the number of those who will in the future be recognized as Shorthorn breeders.

THE PARTIES TO THE SALE.

Wm. T. Hearn sold 51 for \$9190, average \$180.20. Seth Ward & Son sold 34 for \$5,690, average \$167.35. C. C. Chiles sold 12 for \$2,110, an average of \$175.83. C. G. Smart sold 11 for \$1,240, an average of \$112.70. Bennett & Sons 10 for \$1,820, an average of \$182. Chrisman & Lee sold 8 for \$1,505, an average of \$188.12. John C. Smith 5 for \$875, an average of \$175. W. A. Powell 5 for \$1,225, an average of \$245, and the best made. Roberts & Son sold 5 for \$650, an average of \$130. M. W. Anderson 6 for \$615, an average of 106, the others being smaller lots.

Wm. T. Hearn's average was a remarkably good one, considering the number he had in the sale, but his cattle were all in good condition and showed to advantage. Some of the herds represented had been wintered to a disadvantage, and the stock did not look as well as Shorthorns at a sale ought always to look, and their average was lowered on that account, although their high breeding under all the circumstances had warranted higher prices.

In attendance at the sale we noticed the familiar faces of Archie Hamilton, Theodore Bates, Dr. Cundiff, Jas. Richardson, Dr. R. Patton, C. L. Hamilton, C. M. Gifford, George Hamilton—the Hamiltons of Kentucky—C. E. Allen, T. J. Buysers, Samuel Jewett, besides the buyers and representatives of newspapers, Butterworth of Quincy, Eastman and Tansey of Chicago, Heath of Topeka and Heath of Kansas City, and last but by no means least, Col. L. P. Muir, of Chicago, the auctioneer of the sale.

Following is a list of the animals sold, the purchasers and the prices paid.

W. T. Hearn.

Roumella H. C. Chiles, Mayview, Mo.; \$130. Laura 5th. R. E. Richards, Marshall, Mo.; \$145. Ben F. 1550. Glendora 5th. Dr. R. Patton, Hamlin, Kas.; \$150. Lady May. Dr. R. Patton, Hamlin, Kas.; \$100. Nellie and bull calf. S. K. Knox, Independence, Mo.; \$150. Dick. Ira L. Parvis, Independence, Mo.; \$65. Barmpton Duke. W. T. Wallace, Fayette, Mo.; \$95. Red Reel. Dr. R. Patton, Hamlin, Kas.; \$200. Red Reel 2nd. Williams Bros., Eureka, Kas.; \$95. Rosamond Duchess. 2nd. John M. Payne, Plattsburg, Mo.; \$185. Amy Sherwin. R. E. Richards, Marshall, Mo.; \$270. Miss Clay. S. T. Shankland, Fort Scott; \$110. Miss Zaidig 4th. S. T. Shankland, Fort Scott; \$105. Nannie and calf. W. A. Henderson, Kearney, Mo.; \$240. Roany Morn. H. C. Chiles, Mayview, Mo.; \$125. Laura of Waveland. Dr. R. Patton, Hamlin, Kas.; \$105. Marigold 2nd and calf. J. W. Furnish, Independence, Mo.; \$165. Clara Williams Bros., Eureka, Kas.; \$160. Belle Bracelet. H. C. Chiles, Mayview, Mo.; \$160. Laura Gould. Robert Smith, Miami, Mo.; \$245. Baron Booth. Barclay Bros., St. Marys, Kas.; \$115. Nannie Talbot 6th. J. B. Andrews, Cherryvale, Kas.; \$250. Christmas Day. P. Roberts & Son, Independence, Mo.; \$335. Mary's Duke. Wm. Calver, Grenada, Kas.; \$80. Lizzie Turner. J. Burris, Miami, Mo.; \$160. Nannie Turner. Williams Bros., Eureka, Kas.; \$225.

Miss Turner. S. K. Knox, Independence, Mo.; \$165. Adelaide Rose of Sharon and cow calf. G. R. McDaniels, Miami, Mo.; \$250. Rose of Sharon 4th. W. Pickrell, Alma, Kas.; \$145. Rosette 4th. Thos. Ferguson, Westport, Mo.; \$145. Rosette 6th. A. G. Garnett, Miami, Mo.; \$180. Welcome 15th. A. G. Garnett, Miami, Mo.; \$175. Sharon Welcome. — Joplin, Longwood, Mo.; \$250. Welcome 6th. G. R. McDaniels, Miami, Mo.; \$210. Welcome 10th and calf. George Hawkins, Marshall, Mo.; \$265. Welcome Miss 10th. W. O. Pickrell, Ottawa, Kas.; \$135. Welcome Miss 7th. Theo. Bates, Bates City, Mo.; \$160. Welcome Miss 6th. W. M. Hudspeth, Buckner, Mo.; \$190. Maasie Bryan. B. M. Moore, Liberty, Mo.; \$255. Hada. C. T. Pope, Weston, Mo.; \$250. Ann Reid 9th. J. B. Stanley, Neodesha, Kas.; \$225. Minnie T. 2nd. Miller Bros., Junction City, Kas.; \$250. Minnie T. 3d. Dr. R. Patton, Hamlin, Kas.; \$140. Red Man. G. W. Fisher, Independence, Mo.; \$150. Lamp Lyne. G. B. Hinman, Harding, Mo.; \$350. Laura 6th. C. P. Brotton, Lee's Summit, Mo.; \$185. Laura 7th. Frank Playter, Walnut, Kas.; \$150. Isabella 2nd and calf. J. D. Casanbury, Independence, Mo.; \$135. Savannah 8th. H. C. Branning, Independence, Mo.; \$225. Welcome Miss 8th. C. Thorpe, Weston, Mo.; \$180.

S. E. Ward & Son.

Rose Belle Walnut 3rd. John M. Payne, Plattsburg, Mo.; \$165. Leslie Beauty 4th. Williams Bros., Eureka, Kas.; \$170. 2nd Star of Walnut Grove. Dr. R. Patton, Hamlin, Kas.; \$215. 1st Star of Walnut Grove. Dr. R. Patton, Hamlin, Kas.; \$300. Vellum of Walnut Grove 2nd. Dr. R. Patton, Hamlin, Kas.; \$200. Vellum Star 2nd. Geo. Hawkins, Fairville, Mo.; \$155. Constance Oxford 2nd. E. A. Osborn, Coffeyville, Kas.; \$225. Oxford Queen 4th. Williams Bros., Eureka, Kas.; \$165. Oxford Bates. J. H. Wicks, Melbourne, Kas.; \$75. Magenta's Duke. J. Burris, Miami, Mo.; \$155. Roan Duchess Oxford 2nd. Geo. Hawkins, Fairville, Mo.; \$200. Major Bell Duke. James M. Lane, Redtown, Mo.; \$100. Victoria Bell Duke. E. A. Osborn, Coffeyville, Kas.; \$80. Oxford Victoria 2nd. S. T. Ferguson, Westport, Mo.; \$185. Lady Oneida 2nd. S. T. Shankland, Fort Scott; \$280. Oxford Craggs. J. R. Hudspeth, Lake City, Mo.; \$105. Agnes Beauty. Williams Bros., Eureka, Kas.; \$90. Gems Beauty 2nd. F. Playter, Walnut, Kas.; \$125. Gem of Walnut Grove. F. Playter, Walnut, Kas.; \$290. Kirklevington Knightly Duke. C. Abbott Eureka, Kas.; \$175. Rosemarys Duke. Lipscomb Bros., New Santa Fe, Mo.; \$195. Lady Sale Walnut. Williams Bros., Eureka, Kas.; \$135. 3rd Star of Walnut Grove. Thos. Ferguson, Westport, Mo.; \$160. Rose Belle. J. Burris, Miami, Mo.; \$175. Hugh Miller. W. Faulkner, Victoria, Kas.; \$110. Belle of Woodland. S. K. Knox, Independence, Mo.; \$180. Sharon Oxford 2nd. Bartlett Bros., St. Marys, Kas.; \$200. Marys Bell Duke 2nd. W. H. Gibson, Sedan, Kas.; \$135. Belle Rosy. W. A. Pickrell, Ottawa, Kas.; \$160. Belle Rosy 2nd. W. M. Hudspeth, Buckner, Mo.; \$195. Belle Rosy 3rd. H. C. Kearney, Eureka, Kas.; \$140. Sharrons Oxford. N. C. Wilcox, Independence, Mo.; \$175. Fairview Duke. J. L. H. Franklin, Lake City, Mo.; \$190. Daisy. Frank Playter, Walnut, Kas.; \$115.

C. C. Chiles.

Minnie Perkins 8th. James Carter, Lone Star, Mo.; \$125. Flora 3rd. James Carter, Lone Star, Mo.; \$295. Flora 9th. S. H. Chiles, Buckner, Mo.; \$145. Kitty May 9th. S. Smith, Mayview, Mo.; \$135. Belle 20th. S. T. Shankland, Fort Scott; \$185. Hattie James 3rd. Williams Bros., Eureka, Kas.; \$290. Victoria 11th. J. W. Furnish, Independence, Mo.; \$150. Kitty May 16th. J. W. Furnish, Independence, Mo.; \$140. Kirks Duke 3rd. Silas Gibson, Independence, Mo.; \$120. Belle 21st. J. W. Furnish, Independence, Mo.; \$160. Belle 18th. S. K. Knox, Independence, Mo.; \$205. Carlotta 4th. J. P. Stanley, Neodesha, Kas.; \$300.

C. G. Smart.

George 2nd. Dr. R. Patton, Hamlin, Kas.; \$85. George Elliot. Dr. R. Patton, Hamlin, Kas.; \$100. Rosebud 4th and calf. Dr. R. Patton, Hamlin, Kas.; \$120. Mary S. Frank Cattle, Walnut, Kas.; \$65. Winnie. J. H. Wicks, Melbourne, Kas.; \$130. Marion. Henry Hobbs, Whiting, Kas.; \$115. Belle 8th. S. K. Knox, Independence, Mo.; \$125. Prairie Flower. E. Mersham, Buckner, Mo.; \$125. Alline and calf. Williams Bros., Eureka, Kas.; \$155. Winnie Duncan. Dr. R. Patton, Hamlin, Kas.; \$80. Frances Marion. W. H. Watkins, Richmond, Mo.; \$140.

Bennett & Sons.

3d Airdrie of Rosewood. J. J. Adams, Kansas; \$225. May Rose 17th. M. West, Kansas; \$170. 5th Airdrie of Rosewood. P. J. Stanberry, Lee's Summit, Mo.; \$125. 4th Duke of Rosewood. H. C. Hardy, Eureka, Kansas; \$200. Corna's Airdrie. H. A. Ensign, Newton, Kansas; \$145.

Elena 5th. Williams Bros., Eureka, Kansas; \$225. Bettie 2nd. H. A. Ensign, Newton, Kansas; \$115. May Rose 18th. W. C. Hawey; \$200. Honest Abe. E. L. Brown, Asherville, Kansas; \$140. Waunette 6th. Williams Bros., Eureka, Kansas; \$205.

A. J. Powell.

Logan. Lewis Halliday, Independence, Mo.; \$100. Apollo. E. J. Lewis, Almont, Kansas; \$100.

W. A. Powell.

Banker. C. M. Gifford, Millford, Mo.; \$335. Maj. Warner. J. H. Hockaday, Independence, Mo.; \$355. Moses. Wm. Larocque, Concordia, Kansas; \$100. General Lee. P. Hull, Eureka, Kansas; \$235. Prairie Prince. J. Daniels, Louisburg, Kansas; \$200.

W. A. Cunningham.

Jay Gould. M. Campbell, Plymouth, Kansas; \$140. Orrick. J. Gordon, Cherryvale, Kansas; \$125. Rylee. C. Hayes, Stansberry, Mo.; \$100. Lester. I. Farish, Boxford, Mo.; \$80.

John T. Smith.

Miss Chilton 12th. George Hawkins, Fairville, Mo.; \$285. Artless Myrtle. Williams Bros., Eureka, Kansas; \$125. Cadence. W. A. Henderson, Kearney, Mo.; \$155. Lady Florence. R. E. Richards, Marshall, Mo.; \$165. Lorena's Logan. J. O. Ford, Independence, Mo.; \$165.

T. N. Smith.

Dickens. M. Dale, Grenada, Kansas; \$105.

T. T. Hearn.

Maud D. C. Thorpe, Weston, Mo.; \$135.

Powell Bros.

Ross. Edgar Young, Aulville, Mo.; \$165. 2nd Airdrie of Rosewood. T. B. Price, Brownsville, Mo.; \$350. Low Bennett. S. L. Standish, Hume, Mo.; \$140. Wiggins. James Swope, Wamego, Kansas; \$120.

J. Powell & Sons.

Independence. J. B. Andrews, Cherryvale, Kansas; \$255. Nicholas. Thomas P. Drive, Grantville, Mo.; \$145. Dacotah. A. B. Jones, Independence, Mo.; \$190.

Christman & Lee.

Hope of Airdrie 4th. J. T. Smith, Independence, Mo.; \$155. Roxanna Duchess and calf. Dr. R. Patton, Hamlin, Kansas; \$200. Sue Challenger 2nd. A. C. Garnett, Miami, Mo.; \$160. Gratitude. W. A. Harris, Lawrence, Kansas; \$255. Carrie Kenney. G. R. McDaniels, Miami, Mo.; \$290. Amelia May 2nd. H. C. Harney, Eureka, Kansas; \$200. Rosa's Duke. W. A. Cunningham, Independence, Mo.; \$140. Oakdale Duke 6th. R. M. Fields, Lee's Summit; \$95.

M. W. Anderson.

Lulu. J. W. Furnish, Independence, Mo.; \$85. Nellie Pearl. J. W. Furnish, Independence, Mo.; \$70. Airdrie's Duke. L. Hilder, Kansas; \$90. Kate Pearl. R. Hughes, Independence, Mo.; \$150. Maggie. C. P. Brougham, Lee's Summit, Mo.; \$140. Lala 6th. C. J. Cowherd, Lee's Summit, Mo.; \$100.

Mrs. C. Pagsley.

Mattie Rose of Sharon. W. H. Watson, Richmond, Mo.; \$130. Dixie Rose of Sharon. W. H. Woodie, Ottawa, Kansas; \$150. Autumn. H. F. Wicks, Milver, Kansas; \$65. Bernhardt Rose of Sharon. Frank Playter, Walnut, Kansas; \$140.

P. Roberts & Son.

Francis. Ira L. Purvis; \$65. Lawson. J. H. Wicks, Malvern, Kansas; \$35. Truth. S. Playter, Walnut, Kansas; \$175. April Rosa of Sharon. J. Paine, Burlington, Kansas; \$225. Gladiola 4th. Frank Playter, Walnut Kansas; \$150.

The Kentucky Shorthorn Cattle.

SALES AT CHICAGO.

We have the following interesting letter from that Prince of Shorthorn Breeders, T. Corwin Anderson, of Sideview, Kentucky, who may be justly placed at the top of Bates' Shorthorn breeders in America, if not in the world. Witness the following bulls in use: 7144 Imported Wild Eyes Connaght, 8503 8th Duke of Vinewood, and 10425 Roan Duke of Sideview, and the following Bates families: Wild Eyes, Craggs, Fennel Duchesses, Roan Duchesses, Places, Chapmans, Hilpas, Foggathorpes, Fletcher's and Hudson's, and the highly bred Bates, Topped Families of Blooms, Vellums, J's, Princesses, Cypress, Mazurkas, Filligrees, Miss Wileys, Barmpton Roses and others; and this is what Mr. Anderson has to say:

"The Hamiltons, of Flat Creek, in individuality and breeding, will sell fifty of the very best cattle that they have ever sold at any sale, and a few of them at least can be obtained from no other breeder or breeders, and I did not think they could be induced to put a price upon them, as they have steadily refused to do so in the past, even to their best friends. Our U. S. Senator, from Kentucky, and his step-son, Col. A. W. Hamilton, own one of the few large herds, that in the formation of which 'merit' had to go for pedigree," although strict believers in high pedigree for regular breeding of the best individuals with the least number of failures. They sell a lot of yearling and two-year-old bulls, that considering they have been raised in a pasture together, have never been equalled at any sale as a whole, considering merit and pedigree combined. There is not one in breeding and merit but what is fit to head a Shorthorn herd.

I shall sell mostly females, two years old springing in calf, a few cows either with calves at foot or calves this past winter, or heavy in calf, and a lot of yearling heifers, and but seven or eight bulls. These cattle, while representing most of the best bred families in existence, yet have proved their hardiness by being deprived of shelter and stable all this past winter through a misfortune of mine in having my cattle barn burnt, and worse than that, being sick and not able to give them proper personal attention. They will only be in ordinary breeding condition, but being mostly the get of the 8th Duke of Vinewood and imported Wild Eyes Connaght, I may safely promise the breeders of the country that as a whole they are the best lot of individuals I have ever offered, while in breeding, they belong among the "tops." Yours very truly, T. C. ANDERSON.

The Central Illinois Sales.

These sales, announced to come off at Springfield and Harriestown, on Tuesday, Wednesday and Thursday of next week, are deserving the attention of breeders throughout the West. On Tuesday the veteran breeder, J. H. Spears, of Tallula, and E. M. Goff, of Sweetwater, will offer 72 head on the fair grounds at Springfield, consisting of Lady Elizabeths, Lady Highborns, Sanspareils, Red Princesses, Lady of Athols, Young Marys, Multifloras, J's, Red Roses, Pomonas, Harriets, White Roses, Sylvias, Donna Marias, Light Eyes, Teeswaters, Mrs. Mottes, etc., etc., all well topped with first-class bulls; an offering from which breeders and farmers can make selections to suit any purpose for which breeding cattle are wanted.

On Wednesday Samuel E. Prather and Hon. D. W. Smith will sell at the same place 48 cows and heifers and 20 bulls, the character of which we fully set forth last week. They will sell some very choice animals.

On Thursday Messrs. Pickrell, Thomas & Smith will offer their champion herd for dispersion to close the partnership. This herd consists of Hon. J. H. Pickrell, of Harriestown, Ill., where the sale will take place, Ed K. Thomas, of North Middletown, Bourbon county, Ky., and Henry Smith, of Stonypton, in the same county. These gentlemen have the reputation of owning some of the very best Rose of Sharon and Young Marys in Kentucky, and the term "Champion Herd," is given them in testimony of the many times they have carried off the leading prizes at the Lexington, Paris and Winchester (Kentucky) fairs. At these best breeders in the American world exhibit in large numbers, and the honor of carrying off a premium over them all for years in succession, certainly entitles them to the name of Champions. Their cattle will be found of the best and will attract a crowd of anxious bidders, who will each want to get some of the plums. Surely such an opportunity is hardly met with in a life-time, and the very best breeders in the country will be purchasers. Harriestown is on the Wabash railroad, seven miles from Decatur, and about thirty from Springfield, and the sale will commence sharp at 12 o'clock, noon. Col. Judy will make the three sales.

Sam Baldwin's Sale.

Samuel H. Baldwin, of Hedge City, Knox Co., Mo., reports his recent sale thus: The following is a report of my sale of Short-Horns which took place on the 15th inst:

BULLS.

One to Luther Douglass, Locust Hill, Mo., for \$81. One to J. A. Killinger, Hager's Grove, Mo., \$76. One to C. M. Johnson, Sue City, \$85. Five to R. Daniels, Gilmore, Neb., \$358. One to A. S. Ray, La Plata, \$67. One to A. L. Perry, Hager's Grove, \$63. One to G. W. Evans, Hager's Grove, \$57.

HEIFERS.

Three to D. A. Rouner, Plevna, Mo., \$248. One to A. S. Ray, La Plata, \$66. Two to J. M. Spencer, \$201. One to A. G. Dodd, Knox City, \$150. Eleven head of bulls averaged \$72.12. Seven head of the heifers averaged \$103.60, and eighteen head averaged \$84.50. Since the sale I have sold privately to Ray and Spencer of La Plata, Macon County Mo., four two-year-old heifers for \$600.

S. H. BALDWIN.

Gudgell and Simpson.

These gentlemen are now located at Independence, Mo., though to a late date at Pleasant Hill, Mo. They have recently purchased two farms at Independence, one of 175 acres of C. C. Chiles, the other of C. G. Smart, of 120 acres, on the skirts of the city limits. Below Independence, but in Jackson County, Mr. Gudgell has another farm of 540 acres. At the Independence farms they will carry their stock held for sale, having Polled Angus or Aberdeen on one, and Herefords on the other, and of both of these they always carry large herds, having now about 200 Herefords and 50 Polis. They have made four importations of these cattle, one of them just coming out of quarantine at Quebec, consisting of twenty head, and will make another during the summer. Those who attended the St. Louis fair in 1881 will remember the very fine Hereford bull, Anxiety, the property of C. M. Culbertson, of Beecher, Ill. The bull at the head of Mr. Gudgell's herd was sired by him, and though only three years old, is a magnificent animal, large, active, low to the ground and filled out everywhere, of great constitution, and a sure sire. The cows we saw on their farm are admirable specimens of this popular breed, large and rangy animals, insured to the weather and fat even now, though coming through the winter off grass and hay, and many of them sucking calves. Their bulls go mostly to the plains in the west, where they have a large trade, and a range of their own, Towers and Gudgell, with nearly or quite 4000 cattle; they also have a ranch in the Pan-handle Texas, the latter being their breeding grounds, and that in Montana their steer or feeding ranch. Our Texas readers of the RURAL WORLD will not only find these gentlemen always well stocked with both Hereford and Polled bulls, but also good gentlemen thoroughbreds all, but also good gentlemen that will deal with them as square as the fairs, and particularly at the St. Louis fair, and will be on hand next fall.

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How often do we hear the auctioneer remark when selling a well-bred Short horn, "He only wants a little more flesh?" It is a grand mistake to send animals to a sale open to such a charge, and breeders ought by this time to know it.

• Alex. McClintock, of Millersburg, Ky., has gone to New Mexico on a visit with

Laminitis is a disease in which preventive treatment may and should always be adopted; and one of the principal things in this is good shoeing. If the foot is very flat and wide, clips should be placed on the outside of the shoe, and the shoe allowed to rest upon the sole if it can be borne. The animal should not be driven when his feet are overgrown or hard, nor should an animal from

of Shorthorn Cattle of the best families. Stock for sale. Inspection invited.

or our new book—**Daughters of America.**
It takes wonderfully. Price, \$2, worth \$3.
FORSHEE & McMAKIN, Cincinnati, O.

to poor. Dr. Kruse, 2844 Arsenal St., St. Louis.

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The Dairy.

Weaning and Feeding Calves.

About the first of January I bought a cow and calf, the latter three weeks old and had suckled the cow up to that time. I at once took it away to feed by hand; found it stubborn for a day or so, but hunger soon brought it to terms. I commenced at once feeding it with skimmed milk and hay tea, strengthened with about a tablespoonful each of oil meal and coarse flour for each feed. These additions were increased gradually until at about 6 weeks we gave a teaspoonful of each, including the same proportion of bran. We found the best way to add these ingredients was to mix them and make a porridge in advance, to be stirred into the milk and tea when warmed.

The tea we made by packing a wash-bowl full of good timothy hay and cooking it for two hours over a moderate fire, then pouring out into jars; this would last several days.

On the 6th of January I bought another calf of a milkman; it was about four days old. Feed it once part new and part skim milk, with the addition of about the same quantity of coarse flour and oil meal, increasing these additions gradually, and in about a week feed only skim milk; at two weeks commenced giving a little hay tea, a pint or so at first, increasing regularly, so that when one month old the feed was half hay tea and half skimmed milk, with an increased portion of the other ingredients.

On the 20th of January I bought another calf 6 days old, which was treated in the same way. By the middle of February I found we could feed another without any difficulty, but could not get such a one as I wanted, and have not been able to since; so have but three now, but found I could add another one every month and feed them well, by good management, all from the milk of one cow (from 3 to 4 gallons per day), besides furnishing a small family with milk, cream, and butter, and a surplus of 3 or 4 lbs. a week to sell, of the latter. I should have said that I kept hay and corn fodder before them all the time, and occasionally gave a feed of bran, corn and oil meal mixed dry. Now I have got three as nice, sleek calves as ever I raised, without any great trouble or expense. The only trouble I had was when the second one (a grade Devon) got to eating too much bran and was "loose" for a day or two, but two feeds of new milk straightened him right up, and he is the best of the three now—the others being grades of Jersey and Short-horn.—*Cor. Ohio Farmer.*

What is an Ayrshire?

The Ayrshire breed of cattle originated in the country of that name in Scotland. They have been brought to their present high state of perfection principally through careful selection in breeding. They have now been bred for more than a century with special regard to their milking qualities. In color they are generally red, or brown and white, distinctly marked. They are of medium size, compactly built, and with such a perfect set of digestive organs that they assimilate food with the least possible waste, thus converting into milk all the available portions of their food. In disposition they are kind and docile and are very appreciative of kind treatment.

Ayrshire milk is pronounced by analysts and physicians to be a perfect food, and its composition more nearly approaches to the milk of the human race than that of any other breed of cattle. It is on that account qualified in the highest degree for the growth and nourishment of young children, and for the sustenance of the adult. Being rich in casein, it is particularly adapted for the manufacture of cheese, giving larger returns for the amount used than other milks. Butter made from Ayrshire milk is noted for its mild, delicate flavor, firm texture, and keeping qualities. Ayrshires are not only large but rich milkers; they are industrious feeders and hold out their flow of milk well to the end of the season. On account of their thrifty make-up the heat and dry weather does not affect their flow of milk in the same way that it does cattle of the larger breeds. In fact they are pre-eminently the poor man's cow, and will give more milk and make more butter for the amount of food consumed than cattle of any other breed.—*National Farmer.*

Treatment of Jersey Calves.

J. H. Walker, in an article in the *Country Gentleman* on the above topic, condemns in strong terms the high feeding of calves designed for dairy stock or any feeding beyond what will keep them in a fair thrifty condition. He says:

The younger the animal is when this bad habit of making flesh and fat begins, the more controlling it will be, and the more likely the animal will be to transmit that habit to its offspring.

Nothing should be fed to bulls more stimulating than good hay, and at times a few oats, shorts, or both, with coarse food. Plenty of coarse hay, straw and flat grass even should be given at times. The digestive organs of a butter-bull, especially when young, should be taxed and distended precisely as those of a female designed to produce butter.

Heifers should be fed nothing but skimmed milk, grass, rowen, good hay, coarse hay, flat grass, straw, corn stubble, in fact everything to distend and tax their digestive organs, and with nothing more stimulating, before they drop their first calf, than oats or shorts, or similar food. The rule for keeping heifers to make good cows, is rather extravagantly expressed by saying: "A heifer should have a paunch large enough to turn itself around in." Unwisely as they are in such a condition, such heifers make the best cows. The rule is to feed just enough of such things as are found growing condition and no more—the less the better—and never allow a milk or butter animal to lay on fat. Experienced dairymen never go into herds that are fat and sleek for their cows. They know that the feeding necessary to produce such conditions in milk and butter animals, impairs their power to accomplish the thing for which they are to be kept, namely, the making of milk and butter. Meat, not milk or butter, is what they will ever after make. They will "take better care of themselves than of their owners."

When the Dairy Convention was first held in New York, its statistics of the export trade in dairy products took the country by surprise. They were already

reckoned in millions of pounds annually, and Queen Cheese seemed to her enthusiastic votaries almost to threaten the supremacy of King Cotton himself, so incredible was the rate of her progress. During the last year or two these glowing prospects have been clouded. For the first two months of this year the cheese exports were less than five million pounds, whereas in January and February of last year they were more than sixteen millions; and taking ten months together, there was a decline from 128,000,000 pounds to 89,000,000—a loss of about 40,000,000 pounds. Butter exports also fell off in the same period from sixteen million pounds to seven and a half millions. That a greater part of this decline was due to drought and other unavoidable causes is clear; but it seems probable that oleomargarine and lard cheese have also had a share in the result.

The Jersey stock will never be really known until a commission is appointed by the American Jersey Cattle Club, whose business it shall be to look up the tests already made among Jersey cows before and after importation, and to direct the manner of testing, receive all reports of results, record the same, and give them publicity to breeders and to the world. This probably could be done by some one man, selected and appointed for this one work, whose income, if properly arranged by the club, would amply repay him for his trouble. The West loudly calls for such a commission, and the majority of the East will second the motion. Give us the commission, and breeders by scores will test and report accordingly.

Grade up your herds. Keep a record of the number of quarts each of your cows and heifers gives. Weed out all that don't pay for their feed, with a fair profit over and above the cost of keeping. If our farmers had begun this practice 50 years ago, we should now have a better lot of cattle than can be found in the known world.

F. S. Pear, Palmyra, N. Y., milks his cows at six o'clock morning and evening, throughout the year. This milking at regular intervals he regards as very important in increasing the flow of milk, but it requires pretty early rising for winter, at least an hour before sunrise for two or three months, during the shortest days. His cows are kept in warm basement stables.

In Vermont the dairy interests have been more intelligently conducted than in most other sections. The result is that the better yield of cows has increased in the last 14 years an average of 50 pounds per cow. This increase is nearly all clear profit, as the cost of keeping a good cow is no more than that of keeping a poor specimen. Some of the gain is due to better feeding; but by soiling and ensilage the greater amount of stock may be kept, and if butter and milk be produced, at less expense than under the old methods of pasture, hay, and grain.

Cows are exceedingly fond of millet and it is an excellent milk producing fodder. It should be grown in light, sandy soil, at least it is more thrifty on such soil. By manuring it will produce five tons to the acre after being cured. The hay should be slightly moistened and sprinkled with a little corn meal before being fed.

The Poultry Yard.

The Dust Bath.

Those knowing the value of dust bath for fowls, summer and winter, consider it essential to successful poultry keeping. And how few of our poultry keepers who give their fowls a chance to revel in a heap of loose earth, sand or ashes during their confinement in winter?

The dust bath is to poultry nature's cleanser and renovator and is as necessary for cleansing the feathers of fowls from vermin and effete matter as a cool pure water bath is to the person of cleanly habits.

Poultry with free range in summer will be able to help themselves to a dust bath if they have to roll in the newly-made flower or vegetable beds. With fowls in confinement the means and material must be supplied. A dry mass of fine sand or road dust, fine loam or coals ashes will do. This mass of dry material should be under a shed to protect it from rain in summer time, and in the sunniest corner of the hen house in winter. If we watch the habits of all wild game birds, we can see them in the open clearings and on the country roads, at early sunrise, dusting themselves as rapidly as possible; and if we give our domestic fowls a chance, we can see an instinctive desire in the young as well as the old to scratch, and pulverize the earth in lumps, and will then adjust their feathers, and by the rapid action of their claws are enabled to dust thoroughly, and by shaking rid themselves of lice. The dust bath is made more effective by putting a handful or two of sulphur and carbolic powder through the mass and mixing them together.—*American Poultry Journal.*

Value of the Sunflower.

Agriculturists claim it is the best egg producing food known for poultry, keeping them in a thriving condition and largely increasing the production of eggs. Every poultry raiser who tries it will find that this seed is the best food known for glossing the plumage of fowls, and is almost indispensable to those who want to fit their birds for exhibition to the best advantage. The Russian sunflower is easily raised, requires very little care, can be grown in fence corners, or other places difficult to cultivate. Its production of seed is immense, yielding often at the rate of one hundred bushels to the acre. It should be planted in hills four feet apart, any time from the 10th of May to the 1st of July. Three quarts of seed will plant an acre.

The Plymouth Rock fowls originated on the Clarke farm in South Woodstock, Conn., about seventeen years ago, I think. If the exact date is required, I can, with little trouble, ascertain. The first cross was made by George W. Clarke, between a White Cochinchina and a Black Cochinchina. (The statement was once made that the hen was a Black Java, but that was incorrect). The second cross was made by Mr. Joseph Spaulding of Putnam, Conn., between the pullets of the first and a Dominique cock, and that made the "pure" Plymouth Rock fowls. They were named by Rev. Mr. Ramsdell, of

Thompson, Conn., who was a great hen fancier, and purchased his fowls of Mr. Spaulding. Mr. Dyer Upham, of Thompson, also purchased fowls of Mr. Spaulding, and from him came what is known as the Upham strain. All the Plymouth Rocks were started from those two crosses made by Geo. W. Clarke and J. Spaulding.

There is no need of hens or chickens being destroyed by lice; an occasional washing of the roosts in kerosene, early in the day, so that it will not be too strong when the hens go to roost at night. A little sulphur in the nests of either sitting hens or layers, or a few onion skins, and an occasional feed of chopped onions to the young chick, or the hens that are sitting, are all good protection against vermin. Do not feed onions to laying fowl unless you like the flavor of onions in your eggs, nor even then if you produce eggs to send to market as other people may not like it.

The Apiary.

Conditions of Successful Bee-Keeping.

To insure success, the one who attempts it as a business must have a taste and a love for it, and must be willing to work, for bee-keeping means work; not heavy work, but constant care and attention. All things considered, the Italian bee should be chosen, being more prolific, more hardy and a better honey gatherer than the common black bee. It is also better adapted to our wants than any other bee. By all means have the Langstrath frame, whatever shape your hive may be outside. This frame is easily handled; bees winter well in them; and there are probably more of them in use than all others combined. It is very necessary that we should all use frames of the same size, in that buying and selling they may all fit without any trouble. One should know enough of apiculture to distinguish readily a queen, and to understand that she is the mother of the colony also to know that a lot of drones are not needed, and should not be tolerated; the manner and proper time to obtain artificial swarms; how to raise good queens, and the test of excellence; when, how, and what to feed. If these things are all understood, and one is willing to devote time and pains to bee-keeping, he will succeed.—*Mirror and Farmer.*

Let the apiary be placed on a dry soil, and, if convenient, in some quiet spot away from the busy routine of the domestic circle. It should be shaded by trees to relieve the little occupants from the scorching rays of a burning sun and shield them from too much exposure to strong winds. The best bee house that we have ever used, is one with the back boarded up and with a good shingle roof. The hives should always face the east if possible, as by so doing your bees get the morning sun, and few storms come from that direction to beat against the front of the hives. Let it be located where they can readily be seen in swarming time from some door or window from the kitchen if possible that the women folks may give the alarm in case of swarming. The grass should be kept short by occasional cutting, as it is more convenient to get around the bees, and there is not so much liability of their being lost by falling into the grass. All ant-hills in the immediate neighborhood of the apiary should be destroyed. Spider webs and the like should be kept away from the hives. I would recommend the planting of trees where you are not already favored with them—such as the bass-wood, poplar or tulip trees, horses chestnuts, commonly known as the buck-eye, all of which afford a beautiful shade and are known to supply honey in abundance. A room, as sometimes provided in the garret dwellings, is very objectionable, and we speak decidedly against any such arrangement, as the bees and honey are handled with difficulty.—*Practical Farmer.*

It has long been a question among farmers as to whether bumblebees exert any beneficial influence upon red clover. It is known that flowers which are close fertilized, or those fertilized by pollen from the same flower, do not generally set as many seeds as those fertilized with pollen from other flowers. Bees carry this pollen from one flower to another. Prof. Beal has made careful experiments upon this point for the past six years with quite variable and unsatisfactory results. Still, on the whole, they show that clover plants visited freely by bees set more and better seeds than those not visited.

It is known that a queen bee has deposited as many as 3000 to 4000 eggs in twenty-four hours, and in twenty-one days they can emerge from their cells perfect bees, there being about 35,000 to 40,000 workers in a good colony. The entire colony becomes new, every two or three months during the working season, owing to the amount of honey obtained and the distance travelled in gaining it.

CHAFF.

There is a man on West Hill so ugly that he is afraid to sleep with himself.

Dr. Pierce's "Favorite Prescription" is the debilitated woman's best restorative tonic.

The dudes down east have struck for higher collars.

"Figures do not lie," but the accountant does, very frequently.

Over 250,000 Howe Scales have been sold, and the demand increasing continually.

"One touch of nature makes the whole world kin," but that doesn't prevent family fairs, all the same.

Exactly what is sought after—A safe, reliable, not repulsive remedy that can be taken without interfering with business or pleasure or disorganizing the system. Such is in Simmons Liver Regulator, purely vegetable.

Puck calls Lydia Pinkham the "Venus of Medicine." Then is Oscar Wilde the Apollon of Belvedere.

It has been ascertained that Professor Wiggins is writing all these newspaper paragraphs about Mr. Tilden's robust health.

Dr. C. W. Benson's Celery and Chamomile Pills are prepared expressly to cure and will cure Headache of all kinds, Neuralgia, Nervousness and Dyspepsia. Proved and endorsed by physicians.

John B. Gough has watered his talk more than any other man in America, save only William J. Vandergrift. We mean William Van Goulderbitt.

Wm. A. Gaudin, St. Louis, Mo., says: "I

have been greatly benefited in vertigo and pain in my head by Brown's Iron Bitters. There are sixty-five thousand lawyers in the United States. And yet, to read some of the laws, you wouldn't think there was one.

The Diamond Dyes always do more than they claim to do. Color over the old dress. It will look like new. Only ten cents for any color.

The other day a Burlington magistrate fined a man for using coarse language. There's genuine civil service reform for you.

Young or middle aged men suffering from nervous debility, loss of memory, premature old age, as the result of bad habits, should send three stamps for Part VII of Dime Series pamphlets. Address World's Dispensary Medical Association, Buffalo, N. Y.

A cubic foot of water weighs only sixty-two and one-half pounds, but six inches of whisky sometimes weighs a ton. Now come on with your high license.

The "Wild Men of Borneo" with Barnum's circus wear their hair like Senator Mahone. This remark is not intended as a compliment to either party, but is merely made as the simple statement of a historical fact.

The opinion of the general public in regard to Ayer's Cherry Pectoral is confirmed by clergymen, lawyers, public speakers, and actors. All say it is the best remedy that can be procured for all affections of the vocal organs, throat, and lungs.

Some of the eastern papers are discussing the important question whether "dude" is pronounced in one or two syllables. Out west it is generally pronounced darned fool.

Bright's Disease, Diabetes—Beware of the stuff that pretends to cure these diseases or other serious kidney, urinary or liver diseases, as they only relieve for a time and make you ten times worse afterwards; but rely solely on Hop Bitters, the only remedy that will surely and permanently cure you. It destroys and removes the cause of disease so effectually that it never returns.

A Georgia paper—and a bright one it is, too—is called The Major. It has 250,000 subscribers. Nearly every man in Georgia and the adjacent states thought it was named after him.

Tell it Out. Why not? Good news ought to be told, and it is good news that Hunt's Remedy has cured the worst of kidney diseases, and can do it again and again. There are abundant testimonials to this fact. Mr. Joshua Tullih, of Saginaw, Mich., was cured of Bright's Disease; Mr. John Hunt, of Providence, of dropsy, when death seemed imminent; Mr. S. G. Mason, of Providence, of rheumatism which crippled him; and a host of others of similar diseases, which threatened dissolution. And what Hunt's Remedy has done, it will still do. It is the great kidney and liver medicine of the age. Tell out the good news to all.

It is about time the Irish people quit killing landlords and begin cutting the throats of reformers. They'll make better time in the revolution business in this way. And then they can utilize their victims as fertilizers.

"ROUGH ON RATS."—Clears out rats, mice, flies, ants, bed-bugs, skunks, chipmunks, gophers. 15c. Druggists.

KIDNEY-WORT
HAS BEEN PROVED
THE BEST CURE FOR
KIDNEY DISEASES.

Does a lame back or disordered urine tell you that you are a victim of KIDNEY DO NOT HESITATE, use Kidney-Wort at once, (druggists recommend it) and it will speedily overcome the disease and restore healthy action to the system. For complaints peculiar to Ladies, it is especially adapted, as such as pain, and weakness, Kidney-Wort is unsurpassed, as it will act promptly and safely.

Better sex, incontinence, retention of urine, brick dust or rosy deposits, and dull dragging pains, all speedily yield to its curative power. SOLD BY ALL DRUGGISTS. Price 50c.

KIDNEY-WORT

A well-known clergyman, Rev. N. Cook, of Trempealeau, Wis., says: "I find Kidney-Wort a sure cure for kidney and liver troubles."

KIDNEY-WORT
IS A SURE CURE
FOR ALL DISEASES OF THE KIDNEYS AND
—LIVER—

It has specific action on this most important organ, enabling it to throw off torpidity and inaction, stimulating the healthy secretion of the urine, and by keeping the bile in free condition, effecting its regular discharge.

Malaria. If you are suffering from this insidious, have the chills, are bilious, dyspeptic, or constipated, Kidney-Wort will surely relieve and quickly cure. In the Spring to cleanse the system, every one should take a thorough course of it.

SOLD BY DRUGGISTS. Price 50c.

KIDNEY-WORT

"Last year I went to Europe," says Henry Ward, late Col. 68th Reg. N. G. S. & T., now living at 175 W. Side Ave. J. C. Heights, N. J., "only to return worse from chronic liver complaint. Kidney-Wort, as a last resort, has given me better health than I've heretofore enjoyed for many years." He's cured now and consequently happy.

KIDNEY-WORT

FOR THE PERMANENT CURE OF
CONSTIPATION.

No other disease is so prevalent in this country as Constipation, and no remedy has ever equalled the celebrated Kidney-Wort as a cure. Whatever the cause, however obstinate the case, this remedy will overcome it.

THIS distressing complaint is very apt to be complicated with rheumatism, Kidney-Wort strengthens the weakened parts and quickly cures all kinds of Piles even when physicians and medicine have failed.

PRICE 50c. USE Druggists Sell

KIDNEY-WORT

"I will recommend it everywhere," writes Jas. B. Moyer, Carriage Manufacturer, Myerstown, Pa., because it—"Kidney-Wort"—cured my piles.

KIDNEY-WORT

THE GREAT CURE

FOR

RHEUMATISM

As it is for all the painful diseases of the KIDNEYS, LIVER AND BOWELS, it cleanses the system of the acid poison that causes the dreadful suffering which only the virtuous of Rheumatism can realize.

THOUSANDS OF CASES of the worst forms of this terrible disease have been quickly relieved, and in short time PERFECTLY CURED.

PRICE, 50c. LIQUID OR SOLID, SOLD BY DRUGGISTS.

Try one bottle sent by mail.

WELLS, RICHARDSON & CO., Burlington, Vt.

KIDNEY-WORT

"Mr. Walter Cross, my customer, was prostrated with rheumatism for two years; tried in vain all remedies; Kidney-Wort alone cured him. I have tried it myself and know that it is good."—Portion of a letter from J. L. Willett, Druggist, Flint, Mich.

Wm. A. Gaudin, St. Louis, Mo., says: "I

Buckeye
MOWERS, REAPERS and
SELF-BINDING HARVESTERS
New Model
VIBRATING THRESHERS and
CANTON MONITOR ENGINES.
WM. KOEHLIG & CO., Managers, ST. LOUIS, MO.

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European Hotel
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RESTAURANT.
Rooms, 50 Cents,
Dinner, 25 Cents.
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"THE GOLDEN BELT" —ALONG THE—
KANSAS DIVISION U. P. R'WAY
STOCK RAISING
WOOL GROWING
CORN AND WHEAT
170,000,000 bus. Corn. 35,000,000 Wheat.
The Best in the Eastern Market.
Pamphlets and Maps free. B. McALLISTER Land Comm'r, Kansas City, Mo.

LAND PLASTER
Pays 200 to 500 per cent. Profit
On the Investment. All farmers should try it.
Guaranteed to pay. Send for Circulars and price to
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CARRY ENGINES AND BOILERS IN STOCK FOR IMMEDIATE DELIVERY

MAKE HENS LAY
An English Veterinary Surgeon and Chemist, now traveling in this country, says that most of the Hens and Cattle Powders sold here are worthless trash. He says that Sheridan's Condition Powders are absolutely pure and are worth their cost. He is known to be correct. Send for circulars and Agents. J. B. JOHNSON & CO., BOSTON, MASS.

THE RUSSELL
INDEPENDENT
Lateral Moving Stacker.
Complete. Convenient. Durable.
It saves from two to four men on the stack. Saves the price by depositing it in the centre of the stack.
PRICE, COMPLETE, \$125.00.
Furnished in Four Sizes. Can be adapted to any Thresher. Address for full particulars.
RUSSELL & CO., Massillon, Ohio.

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LINKED TOGETHER BY THE
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THE POPULAR ROUTE FROM ST. LOUIS
TO KANSAS CITY
AND ALL PORTS WEST IN
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Arizona, Nebraska, California, etc.
The Great Excursion Route to and from Kansas Lands and the Mining Districts of the Great West, and in Summer to all Watering Places in the East, North and West—Wisconsin, Minnesota, Michigan, Canada, Eastern States, Rocky Mountains, Colorado, New Mexico, California, Oregon, etc.

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Two Trains a Day St. Louis & Kansas City
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Union Depots in East St. Louis, St. Louis, Kansas City and Chicago.
No other line runs PALACE DINING CARS between St. Louis and Kansas City, and St. Louis and Chicago. Meals equal to those served in any First Class Hotel, only 25 cents.
The finest PALACE RECLINING CHAIR CARS in the world are run in all through trains, day and night, without change, also free of extra charge. FULLMAN PALACE SLEEPING CARS—the best, best and safest in use anywhere.
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At TORONTO EXHIBITION, 1879.
40 Public Exhibitions!
179 Chicks out of 180 Eggs!
Self-Regulating, Durable, Practical and Easily Understood. Will Hatch where none other will. Need not "regulate a room" to insure success.
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AGENTS WANTED to sell DR. CHASE'S 3000 RECIPE BOOK. Sells at sight. For further information, address Dr. Chase's Printing House, Ann Arbor, Mich.
40 Gold and Silver Chromo Cards, no 241ke, with name 10c. postpaid. G. I. Reed & Co., Nassau, N. Y.

The Stock Yards.

Weekly Review of the Live Stock Market.
ST. LOUIS AMUSEMENTS.

NOTICE—To owners of Live Stock and Commission Merchants for the sale of the same: You are hereby notified, that hereafter in cases of any kind of cruelty to any animal or animals, the owner or owners, and the consignee or consignees, in whose charge the animal may be, will be prosecuted to the extent of the law for any neglect to comply with its requirements. Your particular attention is called to the habit of withholding water from cattle after their arrival at these yards. Cattle must be watered within 4 hours after their arrival here. The minimum fine is \$3.00 for each offense toward each animal to which such cruelty is shown.

N. J. McKean,
State Agent to Prevent Cruelty to Animals.

For a long time past, days and weeks—the drift has been downward till cattle would at the climax of high prices command \$7.00 to \$7.15 now sell for \$6.00 to \$6.15. Big steers over 1500 lbs in weight have sold this week for \$6.00 and there was haggling at that price. There is a very general impression abroad that the highest point has been touched, that the sooner one sells now the better and the consequence is that everybody is sending in their stock—thus theory is confirmed by fact.

Light fat cattle of 900 to 1200 lbs sell best and are taken (or were at least for each day) in a law unto itself readily at \$5.25 to \$5.30; this is true because these cattle are unsaleable by butchers, interior shippers and Eastern shippers, while big fat steers only sell for the New York market or export. Cattle in England recently let down, so that the already impaired export trade, suffered another hurt and New York was overstocked.

The common cattle have become more plentiful so that the low range now is \$3.25 to \$3.75, fair cows and other medium killable stuff ranging at \$3.75 to \$4.25, good cows \$4.25 to \$4.75, fair to good light butcher steers \$4.75 to \$5.00, and all grades easy.

Hogs have not shown the same variability, but the tendency has been down in this market also. Undoubtedly a leading factor in the warfare waged against American pork on the other side of the Atlantic. Whatever the cause the effect has been to gradually let prices down to \$7.15 to \$7.35 for good to best hogs and to put rough to choice packing at \$6.50 to \$7.00. The York hogs on Monday were worth from \$6.75 to \$7.00, while others were at the best quotable at \$7.50 to \$7.65. But pork and hogs have remained staid and more uniform during the past season, than during the same season for years past, and if there is as there may be strength in these markets during the summer, there ought, in the nature of things to be a severe decline in the fall—this of course involves a full crop of corn.

Sheep have been for two weeks past doing very well, both as to activity and price; common quality has been discriminated against at a wide difference in price, while good sheep would readily command \$4.25 to \$5.00; common stuff and stockers would sell slowly for \$2.75 to \$3.50.

WEDNESDAY, May 30th, 1883, 2 p.m.
CATTLE—Once more a big supply found cautious buyers ready at first to shave prices all around. Butchers, shippers, stockers and feeders all easy and slow. Bulk of fat to good cows and calves \$3.00 to \$4.00 each. New York was raised a shade better, but western points of supply were full enough to well nigh work up to day's eastern shortage by next Friday. However when once the shipping market opened transfers were freely made and values disclosed an appreciable improvement—say of about 10 cents for the good heavy cattle, and 10 to 12 cents for good light cattle. Matters seemed to improve all the time. Representative sales:

20 native steers.....	1281	\$5.35
21 native steers.....	1020	5.30
6 south-west cows.....	331	4.15
25 native steers.....	1225	5.30
15 native steers.....	1340	5.30
20 Texas oxen.....	1032	4.87 1/2
19 Texas oxen.....	1074	4.87 1/2
133 native steers.....	1286	5.30
30 native steers.....	921	5.30
18 native steers.....	991	5.35
21 butcher steers.....	1265	5.30
18 butcher cows.....	969	5.30
21 Texas cows.....	742	5.30
21 Texas cows.....	762	4.00
27 native heifers.....	650	4.35
18 native cows.....	995	4.50
16 native steers.....	1441	6.15

HOGS—Easier and slow. Most of the offerings lot 50 lbs after long delay and dickerings. Light hogs after all was considered and none cannot be quoted better than \$6.75 to \$6.85, mixed packing \$6.50 to \$7.00, fair to best heavy including good packing butchers and best heavy \$7.00 to \$7.30, culls, rough and coarse hogs \$6.00 to \$6.50, pigs and thin Yorkers \$6.00 to \$6.50, all easy and slow. Representative sales:

20.....	183	\$6.80
14.....	338	6.80
10.....	300	6.80
16.....	258	6.90
58.....	266	7.15
64.....	235	7.00
58.....	231	7.00
32.....	271	6.90
21.....	203	7.10
68.....	269	6.90

SHEEP—Strong and active for all sheep good enough to kill, and the better the sheep the quicker the sale at the strong prices. Representative sales:

81 native sheep.....	118	\$5.00
431 native sheep.....	87	4.70
79 native sheep.....	103	4.75
20 native sheep.....	82	4.00
94 native sheep.....	89	4.00

TUESDAY, May 29, 1883 2 p.m.
CATTLE—Market for shipping cattle slow, and hard to get Mondays prices for extremely heavy weights. Choice medium weight cattle fairly active and steady. Butcher cattle under a fair supply, but common and thin weak. Inquiry for stock cattle limited and quiet. Fat Texas cattle selling well enough, but thin Texans not worth as much here as they on the prairie, and we advise shippers to keep them on the range until fat. Representative sales:

24 native butchers.....	886	\$4.35
17 native steers.....	935	5.25
10 native cows.....	981	4.85
16 native steers.....	1133	5.02
21 Indian steers.....	803	5.12
12 native steers.....	1092	5.50
15 mixed natives.....	1002	4.60
22 Indian steers.....	845	5.15
45 native butchers.....	882	5.05
35 native steers.....	1206	5.60
16 native steers.....	1208	5.60
105 Indian steers.....	665	3.37

HOGS—Philadelphia's and butchers selections sold fairly active at firm prices. Packing grades were quiet and unchanged. Yorkers were fairly active and steady. Fat pigs selling fairly active, but stock hogs dull. About all sold. We quote: Philadelphia's \$7.15 to \$7.40, butchers \$7.00 to \$7.30, packing \$6.75 to \$7.00—cows end \$6.25 to \$6.50, Yorkers \$6.70 to \$6.95—bulk sold at \$6.00. Pigs \$6.00 to \$6.25. Stockers nominal at \$5.00 to \$5.75. Representative sales:

20.....	286	\$7.15
26.....	261	6.90
13.....	189	6.90
40.....	135	6.90

55.....	230	7.00
162.....	308	7.25
13.....	190	6.90
33.....	316	6.90
17.....	133	6.25
10.....	151	6.25
13.....	223	6.90
14.....	270	7.00
53.....	138	6.95
11.....	182	7.30
72.....	183	6.90
52.....	193	6.90

SHEEP—Fairly active for good and fat, and slow for thin and common. Sales—72 av 100 at \$4.37 1/2; 23 av 123 at \$4.50; 17 av 97 at \$4.50; 297 av 104 at \$4.25; 20 lambs at \$3.50 per head.

MONDAY, May 28, 1883. 2 p.m.

CATTLE—Medium weight shipping steers of good quality were fairly active at Friday's closing prices, but heavy steers slow to sell and barely steady, while coarse heavy dull and weak. Pony butchers cattle were fairly active at strong Friday prices, but the common butchers cattle selling lower, and market weak and unsettled. Fat Texas cattle selling well enough, but thin Texans not worth as much here as on the prairie, and we advise shippers to keep them on the range until fat—16 head av 703 lbs sold at \$3.25 cwt. Representative sales:

12 native butchers.....	1131	\$5.50
17 native butchers.....	1088	5.02
16 native butchers.....	928	5.60
19 native butchers.....	1125	5.75
10 thin grass Texans.....	708	3.25
19 native stockers.....	706	4.62
17 native butchers.....	1007	5.50
16 native butchers.....	1128	5.50
21 native steers.....	1150	5.70
17 native steers.....	1240	5.75
12 native steers.....	1274	5.75
123 native steers.....	1217	5.75
19 native stockers.....	771	4.50
86 native steers.....	1491	6.00
16 native steers.....	1151	6.50
19 native butchers.....	1068	5.25
20 native butchers.....	984	5.25
44 Texas steers.....	919	4.62

HOGS—Philadelphia's and butchers selections sold fairly active at last week's closing prices. Packing hogs were dull. Yorkers slow at 5c to 5c lower. We quote: Philadelphia's \$7.25 to \$7.35, butchers \$7.10 to \$7.30, packing nominal \$6.50 to \$7.15, Yorkers \$6.70 to \$6.95—bulk sold at \$6.00. Pigs nominal at \$5.00 to \$6.25. Representative sales:

40.....	201	\$6.85
14.....	208	6.89
92.....	302	6.95
15.....	190	6.90
49.....	273	7.00
10.....	309	7.10
71.....	181	6.85
45.....	268	7.35

SHEEP—Fairly active for good and fat, and slow for thin and common. Sales:

143.....	19.....	\$4.12 1/2
12.....	139.....	4.12 1/2
90.....	stockers.....	70.....
118.....	Texans.....	78.....

GENERAL MARKET.

WHEAT—In market value is still influenced by the excited and largely advancing movement of wheat, and was strong yesterday with an active demand for grades above choice, yet without change of quotable market range. X \$3.35; XX \$3.00; XXX \$4.50; Family \$5.20; Choice \$5.70.

WHEAT—No. 2 red cash 118 to 119 1/2.
CORN—No. 2 mixed cash 50 1/2; No. 2 white mixed 51.
OATS—Irregular and unsettled, demand active No. 2 cash 39 1/2.

HAY—Healthier feeling for all save the low grades; demand better. Sales: East Track—1 car common mixed at \$6.50, 1 red-top mixed \$9.50, 1 prime clover mixed \$10, 1 choice do \$11, 4 prime timothy \$11.50 to \$12, 2 strictly prime at \$12.50, 1 choice at \$14. This Side—2 prime prairie \$7.50, 3 strictly prime do \$8, 4 choice do at \$8.50, 1 common mixed \$6, 2 prime mixed \$12, 1 at \$12.50, 2 prime timothy \$13, 4 strictly prime do \$14.5 choice at \$15, 1 at \$15.50, 1 fancy at \$17.

HEMP—In demand; scarce. Undressed \$7.50 to \$100 per ton, dressed at 6 1/2 to 7 1/2 c per lb, shorts 5 1/2 to 6 c, hauled too at \$7.50 to \$8 per ton, break tow \$35 to \$40.

BUTTER—Market heavy and depressed; stocks largely in excess of demand, and prices entirely buyers' favor. Anything below strictly choice neglected and nominal—not wanted seemingly at any price. We quote: Choice creamery at 18 to 20 c; fancy do at 20 c; a round lot of choice offered at 16c and untaken; choice dairy at 15c—selections 14 1/2 c per lb more; medium at 10 to 12 1/2 c; low 7 to 8 c. Country (lots in pails) at 4c to 6c for low to 8 to 10 for fair and 12 to 13 c for choice.

CHEESE—Quiet; demand light. Full cream at 13 to 14 c; part skim at 8c for prime to 9c for choice; inferior at 3c for low to 7c for fair.

EGGS—Easier at 13c in lots; jobbing higher. LIVE CHICKENS—Dull, heavy and weak, demand very light for any kind and supplies excessive—a great deal of held-over stock on hand; small to medium young and poor old mixed neglected. We quote: Old—Cooks \$2.50, mixed \$2.75 to \$3, hens \$2.50 to \$3, spring—small 75c, medium \$1.00 to \$1.25, fair to good \$1.25 to \$2.25 to \$2.50.

VEALS—Slow and unchanged. We quote choice milk-fed at 8 1/2 c per lb, fair do 7 to 7 1/2 c, heaviest at 5 to 6 c.

LAMBS—Slow at extreme range of \$1.50 to \$3 per head, as in size.

NEW POTATOES—Dull and declining, offerings liberal and consumptive demand not yet thoroughly established. Sales: River receipts—45 bbls Louisiana mixed at \$2.65 1/2, 54 do potatoes at \$2.71, rail receipts—1 1/2 cars bulk at \$1.40 to \$1.45 per sack. We quote: Bulk at \$1.50 to \$1.60 per bu and lots in bbls at \$2.25 to \$2.75 per bbl.

OLD POTATOES—In larger receipts and easier. We quote: Early rose at 50c to 75c, Ajax 75c to 85c, both peerless and peachblow 80c to 85c, burbank 90c to 95c, mixed 60c to 70c—damaged or poor less. Sales: 1 car sack mixed and part car bulk rose at 65c del., 47 sbs rose at 75c, 1 car do on p. t., 1 car bulk Ajax at 75c del., 18 sbs peerless at 80c, 12 and 9 snowflake at 85c, 1 car choice peachblow in bulk at 85c del.

NEW ONIONS—Dull and easier. Sales: 35 sbs at \$4 (sacks containing a barrel).

CABBAGE—Scarce and firm at \$6 to \$6.50 for choice.

WHITE BEANS—Selling in a jobbing way: Eastern—Hand-picked navy \$2.25 to \$2.30; do medium \$2.15 to \$2.20; screened navy \$2.10 to \$2.15; do medium \$2.05 to \$2.10. Country dull at \$1.25 to \$1.75.

APPLES—Season virtually ended—offerings and demand equally light. Choice russets sell at \$6 and roman beauty \$5.50 per bbl in a jobbing way.

STRAWBERRIES—The receipts of home-grown were again large and the quality excellent, therefore buyers looked almost wholly for near-by stock for their wants, and in order to sell shipments they had to be placed at figures in favor of the buyers, as the quality continues poor—small, soft and sandy, and generally poor. Sales ranged per 6-gal case: Missouri—Soft Wilson and Monarch \$2.25 to \$2.50; choice do \$2.50 to \$2.75; Illinois—Fair to choice Wilson \$2.25 to \$2.50; choice Sharpless \$2.50 to \$2.75; fancy do \$3; Kentucky—Wilson and Crescent \$2; Sharpless \$2.25 to \$2.50; Arkansas and Tennessee (small and soft) \$1.50 to \$2; choice \$1.50 to \$2. Selected home-grown sold on orders del. at \$2.50 to \$4-gal drawer.

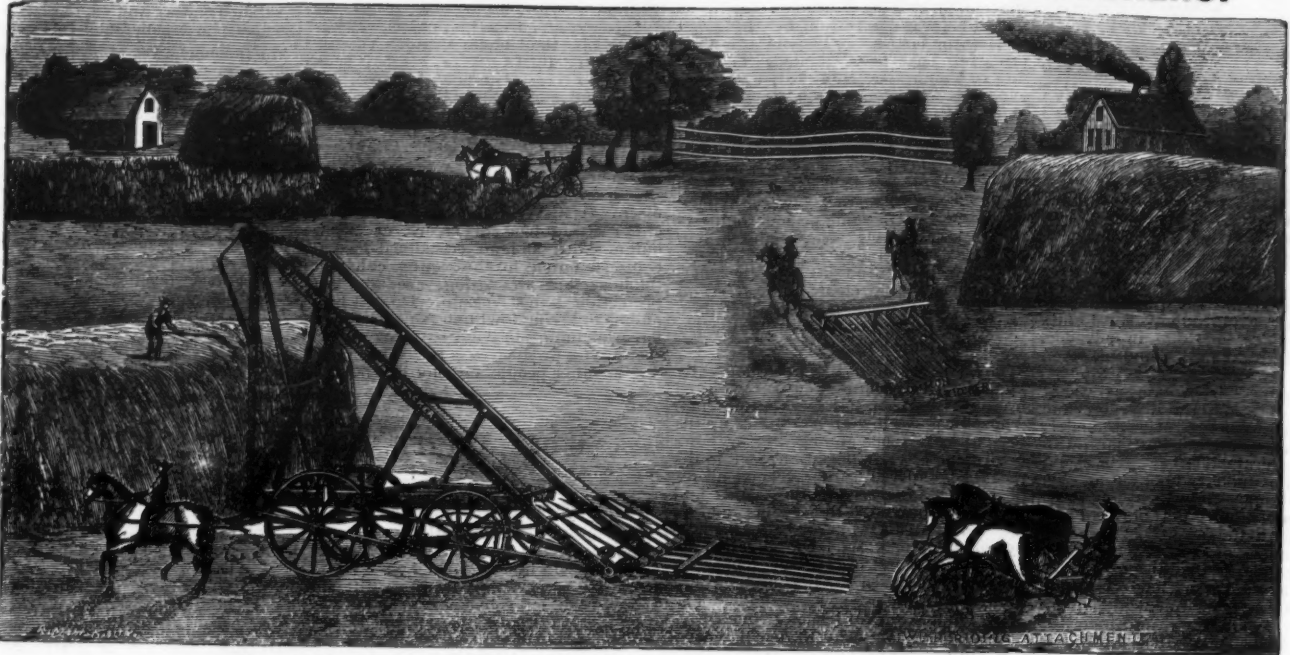
GOOSEBERRIES—Lower at 2 1/2 to 6-gal case for choice.

PEACHES—Scarce and firm; choice Hale's early brought \$1 1/2 to \$2—bu box—Alexander Amosden and other choice varieties \$2.25 to \$2.50. CHERRIES—Scarce and wanted; choice ripe sweet worth \$4.25 per 6-gal case.

PLUMS—Mainly soft, slow sale and lower at \$2.25 to \$2.50 per 6-gal case and 50c to 75c per bu box for Chickasaw, no wild goose received.

DRY FRUIT—Scarce. Apples in demand and firm at 6 1/2 to 7c for fair to 7 1/2 to 8c for prime. Peaches slow and unchanged—quarters and mixed 5 1/2 to 6c, fair halves 6 1/2 c, prime 6 1/2 c. About 50 pkgs sold in lots at quotations.

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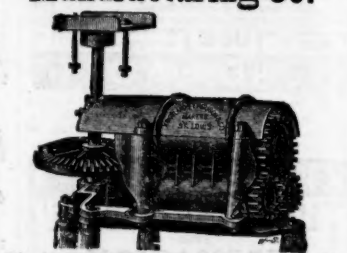
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